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ABSTRACT

Combining reading, language arts, and economics, this interdisciplinary project involved fifth grade students in studying three units dealing with (1) an auto liner named the Karinita; (2) the port of Wilmington (Delaware); and (3) international trade. Specific unit lesson plans are provided in this project description. In unit 1, students learned about collecting and processing information and about competition, specialization, and productive resources, as they applied to the auto liner and the auto liner company. Students toured the ship, interviewed longshoremen on strike at the time, wrote letters, and listened to guest speakers. It was the students' interest and curiosity that led to a study of the port of Wilmington and international trade. They learned about the labor and capital resources of the port, supply and demand, competition, specialization, why countries trade, the costs and benefits of interdependence, the function of money in world trade, and the effects of trade restraints. In the unit activities, students read material published by the port of Wilmington, studied maps, role played, set up an assembly line, conducted surveys, and participated in debates. Posttest scores on the Test of Elementary Economics indicated an increase in knowledge of over 300%. (RM)

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A VOYAGE TO ECONOMIC LITERACY

A Year Long Study Done By Fifth Grade Students

at

Warner Elementary School

Wilmington, Delaware

1981 - 1982

Doris Morris, teacher

SO 015 125

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(Six booklets, 3 on The Port of Wilmington and 3 on International Trade are also accompanying this notebook.)

INTRODUCTION

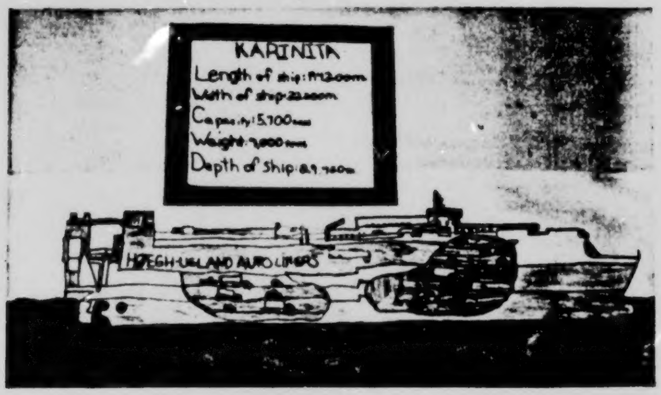
As a classroom teacher, I have discovered a variety of ways in which learning can be extended beyond the four walls of a classroom. My most recent classroom activity involved the adoption of a ship. A neighbor, Paul Govertsen, who works at the Port of Wilmington, arranged for my class to adopt an auto liner. The adoption of this Norwegian ship evolved into one of the most exciting educational experiences of my teaching career. What follows is a summary of our international trade experience. I hope you enjoy your voyage through our materials as much as the class did.

Up the gangplank to begin the voyage!

OVERVIEW

In September my reading class officially adopted the auto liner, the Karinita. The study of this ship led us into a study of the Port of Wilmington. From there we continued on with a study of international trade. What I began as a fun project, planning to use a minimum of class time, turned into a year long study, reaching far beyond what I had ever anticipated. Once we got started, generally one day a week, throughout the whole year, was devoted to studying something related to ships, ports, or trade. A multidisciplinary approach was used, combining reading, language arts, and economics.

The 36 fifth graders involved in this study were of average and above average reading ability. They came from mixed racial and socioeconomic backgrounds.. About one third of the class lived in the city near the school, and about two thirds were bused from the suburbs to school. At the beginning of the year, the biggest one factor they all shared was enthusiasm. By the end of the year, they also shared a knowledge of basic economic concepts. Their post-test scores on the Test of Elementary Economics indicated an increase of over 300%, which I thought was absolutely phenomenal.



A students' drawing of the Karinita

The Karinita

DESCRIPTION OF PROJECT

When thinking about adopting a ship, my overall purposes centered around both language arts and economics. I wanted the students to learn to collect information from a variety of sources and present gathered data in an interesting way. I also wanted to introduce the concepts of competition, specialization, and productive resources, as they applied to the auto liner and the auto liner company.

To begin our study of the Karinita, we had a brainstorming session, listing all the things the students wanted to know about the ship. We then divided the questions into various categories, with a group of six students each agreeing to find the answers to a particular set of questions. Later they planned to share their answers with the rest of the class.

After each group had its questions, the next month was spent gathering information, by means of letters, interviews, and speakers, The students soon discovered that finding answers to some of the questions was challenging. Mr. Govertsen helped tremendously. He came and spoke to the class, showed a film about auto liners, and gave the students a brochure about the Karinita.

Finally in November when the Karinita came into the Port of Wilmington, we went to visit the ship. What an exciting day! Mr. Govertsen, along with one of the crew, toured the class over the entire auto liner. Not one part of the ship did we miss! Then the class got to meet the captain and the crew, and the captain invited the class to have refreshments with them in the galley. It was really an eventful day. Even the newspaper and the local TV station were there filming the students and crew. However, our adventure was not over yet.

The day the class was visiting the Karinita, the longshoremen went on strike and were not unloading the cars. This event aroused a lot of questions from the students. In addition, as the class was riding through the port to get to the Karinita, they saw a lot of things which stirred their curiosity. They had all kinds of questions about things about which I really did not know. As a result, when the class finished sharing the information each of the groups had been gathering about the Karinita, we began to study the Port of Wilmington. (Both Bonnie Meszaros at the Center for Economic Education at the University of Delaware and Holmes Dogherty, assistant port director, were very helpful in assisting me to gather information for this study.)

As I prepared my lessons about the Port of Wilmington, I set as my general objectives that the students would be able to:

- *Describe the factors necessary for an active, economically successful port.
- *Explain how the following principles operate at the Port of Wilmington:
    - supply and demand
    - competition
    - specialization
    - multiplier effect
- *Identify land, labor, and capital resources at the Port of Wilmington.

In order to accomplish these objectives we did a wide variety of activities - read material published by the Port of Wilmington, studied maps, role played, set up an assemblyline,to name just a few. The students kept all their papers about the port in their notebook as we went along, and at the end of the study they combined them into a booklet.

As a culminating activity, the class wrote and produced a slide presentation about the Port of Wilmington.

Again as part of our study, we went to visit the port, but this time a guide showed us around the entire port, instead of just visiting one ship. It was an extremely enlightening trip. The students were particularly fascinated with the different goods that were imported and exported. They had never seen goods like urea, gypsum, and cocoa beans. They never dreamed that the orange concentrate used locally by the Coca Cola Co, came from Brazil, not Florida. Also, they were surprised to discover the fresh Granny Smith apples they had been buying at the super market came from New Zealand. However, one item especially caused a lot of curiosity. The students wanted to know why Delaware, one of the leading poultry producers in the U.S., imported eggs from Israel.

As a result of the students' curiosity about the goods at the port, I decided to follow up our study of the port with an introduction to international trade. Since my knowledge of foreign trade was limited, I used a booklet entitled "Trees and TV in the International Marketplace" that I obtained from the Washington State Council on Economic Education as my primary source of information and ideas. I found it a very valuable resource. My general objectives for this study were that the students would be able to:

*State why countries trade.
*Identify costs and benefits of interdependence.
*Explain the function of money in world trade (how exchange rates are set and fluctuate).
*Explain how trade restraints affect trade.

Again during this unit we did many different kinds of activities. There were readings, simulations, a survey, and a debate. Also, like the port study, the students kept all their papers about international trade, and at the end of the unit they combined them into a booklet about foreign trade. (See appendix.)

As the culminating activity of this study, the students were given the task of creating a game in which the players had to use the knowledge of foreign trade that they had acquired. Then they played and evaluated each other's games. It was an excellent way to review all they had learned.

Finally to conclude our year long study, we had an unusual and thrilling experience. The class went to Philadelphia where we were picked up by a tug and shown around the Port of Philadelphia. Touring the Port of Philadelphia was an interesting contrast to touring the Port of Wilmington. As we cruised around the

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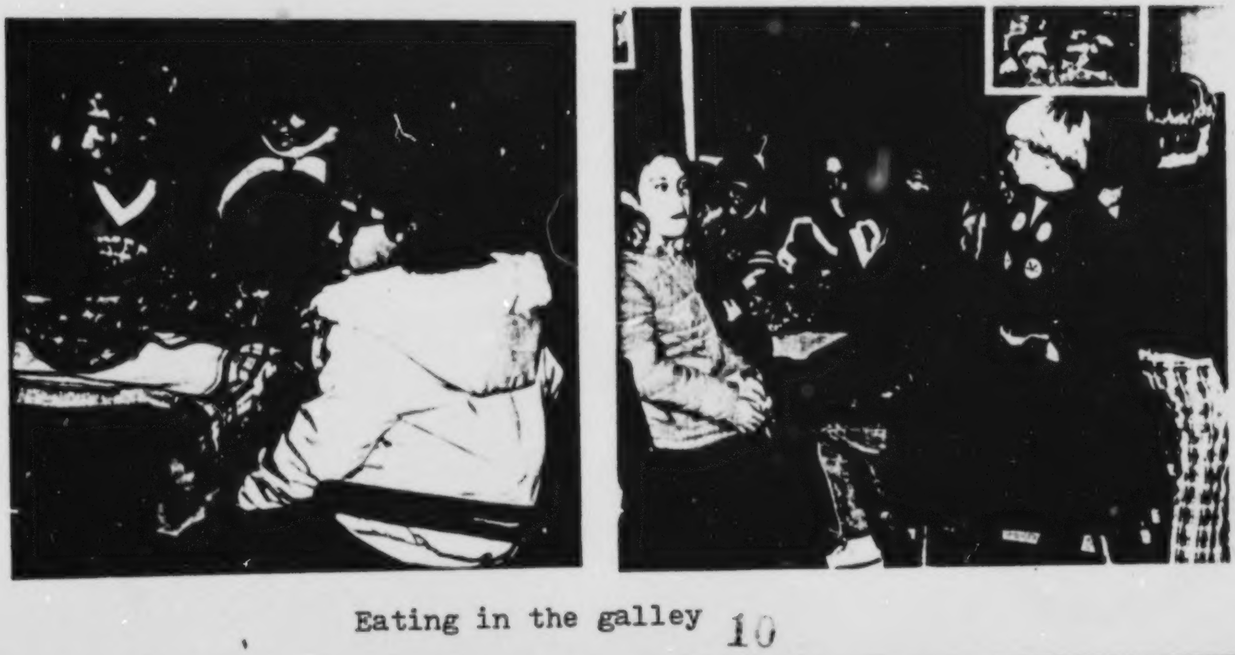
river, one of the crew pointed out the different sites, and told us about the various ships on the river. It was great! Then the captain allowed some of the students to steer the tug and talk on the radio. Also, the cook served all of us lunch in the galley. It was an experience none of us will soon forget. It was a terrific ending to a terrific year. Both the students and I had a good time and learned a great deal.

Looking through the instruments (radar)



Eating in the galley

GENERAL
LEARNING OBJECTIVES

The students will be able to:

- Collect information from a variety of sources (letters, interviews, field trips, books, maps, and charts).
- Categorize information.
- Compare and contrast information.
- Formulate generalizations.
- Formulate and test hypotheses.
- Identify patterns and relationships.
- Generate ideas
- Predict outcomes.
- Identify cause/effect relationships.
- Listen and read for the main idea.
- Identify alternatives and choose from them.

AFFECTIVE OBJECTIVES

The students will:

- Develop an awareness that there is an interdependence of nations.
- Develop an awareness of the importance of ports.
- Voluntarily look for information about a subject they are studying.
- Contribute to groups discussions by asking thought provoking questions or supplying relevant ideas and information
- Begin to form judgments about controversial ideas (trade restraints).
- Find pleasure in learning about the world around them.
- Revise judgments and change behavior in light of evidence presented.
- Approach problems objectively.
- Listen to others with respect.

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KARINITA UNIT OBJECTIVES

At the end of the lessons, the students will be able to:

Lesson 1 - THE KARINITA AND ITS OWNER

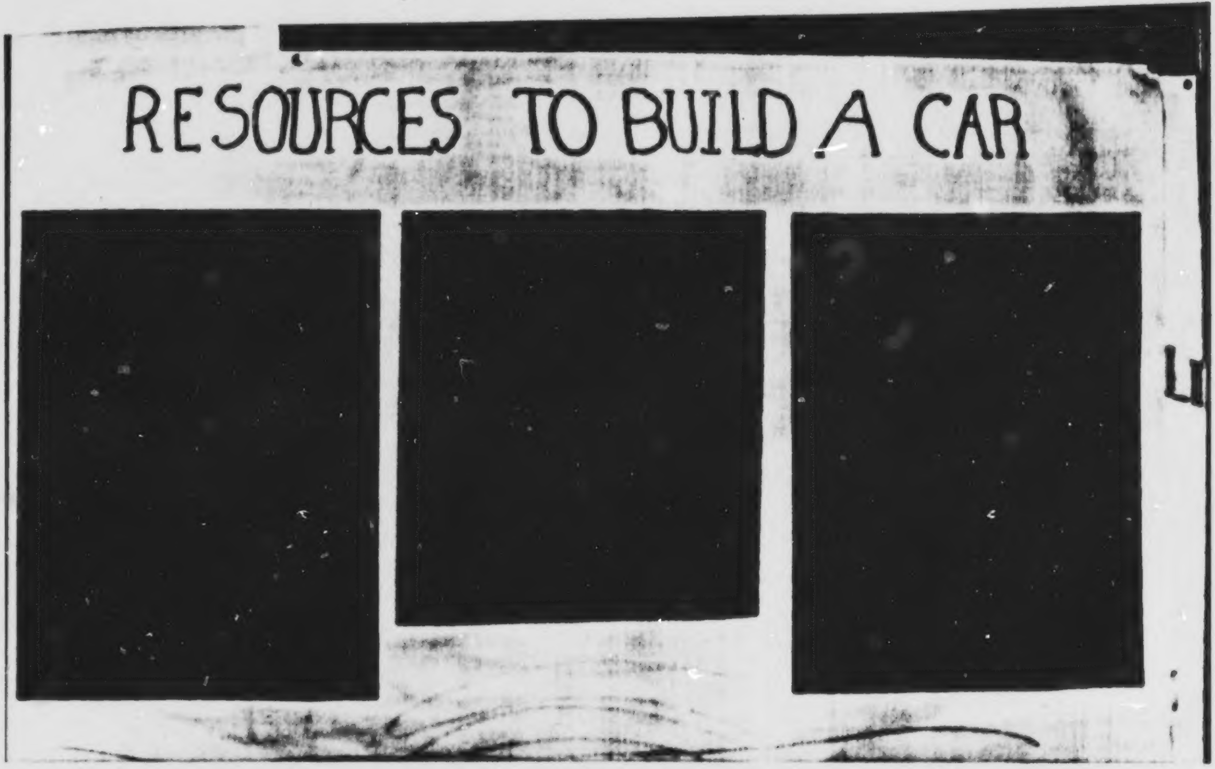
Explain how the people associated with an auto liner specialize.

Describe how competition exists between ports and auto liner companies.

Lesson 2 - FACTORS OF PRODUCTION

State the factors of production and give a verbal definition of each.

Draw a picture with a written caption explaining what people, tools, and raw materials working together are needed to produce a car.



PORT OF WILMINGTON UNIT OBJECTIVES

At the end of the lessons, the students will be able:

Lesson 1 - PORT DEVELOPMENT

To describe the factors necessary for an active, economically successful port.

To identify as to presence or absence of the above factors at various locations along the Eastern Seaboard.

Lesson 2 - THE HISTORY OF THE PORT OF WILMINGTON

To list ways ports have had to adapt to remain competitive.

To speculate on what Wilmington did to make its port the facility it is today.

Lesson 3 - LOCATION OF THE PORT OF WILMINGTON

To locate the port of Wilmington on a map.

To describe the geographic location of the port, including the longitude and latitude.

Lesson 4 - COMPETITIVE SERVICES AND RATES

To predict how a change in the supply or the demand for a product affects its price.

To explain how supply, demand, price and quality of service determine whether a producer will realize a profit.

To explain how competition affects price.

To list those things a port must do to remain a profitable port.

To list the kinds of fees charged at the Port of Wilmington.

Lesson 5 - TRANSPORTATION ACCESS INLAND

To identify and locate the roads and railroads servicing the Port of Wilmington.

Lesson 6 - LAND RESOURCES

To define land resources.

To identify and list land resources at the Port of Wilmington.

Lesson 7 - LABOR RESOURCES

To define labor resources.

To explain how the production process at a port is carried on most efficiently when productive resources are specialized.

To list costs and benefits of specialized division of labor.

To list some of the specialists at the port.

To make a general statement about the results which could be expected if certain specialists at the port did not come to work.

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Lesson 9 - CAPITAL RESOURCES

To define capital resources.

To identify and list capital resources at the Port of Wilmington.

Lesson 10 - CARGO AT THE PORT

To give an example of how trading increases the general welfare.

To cite products that the Port of Wilmington imports and exports.

Lesson 11 - OUTSIDE FACTORS INFLUENCING PORT DEVELOMENT

To explain how factors outside port control affect the economic activity at the port.

IMPORTS
VEHICLES EXPORTED FROM WILMINGTON JULY 79 JUNE 80
CHRYSLER
GEN MOTOR
BELL CANADA
PERSONAL
NOV.
DEC.
JAN.
FEB.
MAR.
APRIL
MAY
JUNE
TOTAL

Posters the students made showing the vehicles exported and imported to the Port of Wilmington

INTERNATIONAL TRADE UNIT OBJECTIVES

At the end of the lessons, the students will be able:

Lesson 1 - INTERDEPENDENCE GAME

To explain how scarcity affects economic decision making.

To identify how cooperative economic actions may benefit many people.

To explain how unequal distribution of resources influence productive decisions.

To organize information and use it to predict a survival strategy in the game.

Lesson 2 - FOREIGN TRADE SEARCH

To define the terms: export and import.

To identify and list products in their home which were made in another country.

To identify contributions of foreign trade to our life style.

To formulate generalizations about U.S. trade with other countries.

Lesson 3 - WORKING TOGETHER FOR COMPARATIVE ADVANTAGE

To identify some of the costs and benefits of interdependence.

To explain how unequal distribution of resources influences production decisions.

Lesson 4 - BALANCE OF PAYMENTS

To generate a sample balance of payments total by completing the student worksheet.

To interpret graphs relating to imports and exports.

To generalize how the balance of payments affects national economic decision making.

Lesson 5 - FOREIGN CURRENCY AND EXCHANGE

To explain what the function of money is in world trade.

To explain how money values are influenced by supply and demand factors.

To explain how an increase in the available currency may cause a decline in its world value.

Lesson 6 - THE FOREIGN EXCHANGE MARKET

To chart the exchange rates of a foreign currency.

To list reasons why exchange rates vary.

Lesson 7 - MONEY FLUCTUATION

To convert dollar values to foreign currencies and vice versa.

To state the reason for 3-month forward purchase transactions and 3-month forward sales transactions.

To state how a change in the value of the dollar affects our imports and exports.

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Lesson 8 - ATTITUDE SURVEY TOWARD INTERNATIONAL TRADE

To assess community attitudes toward international trade.

To identify any economic misconception that citizens may have, such as not understanding interdependence.

To compare and contrast student attitudes with surveyed adult attitudes on foreign trade.

Lesson 9 - TRADE RESTRAINTS

To define: subsidy, embargo, tariff, quota.

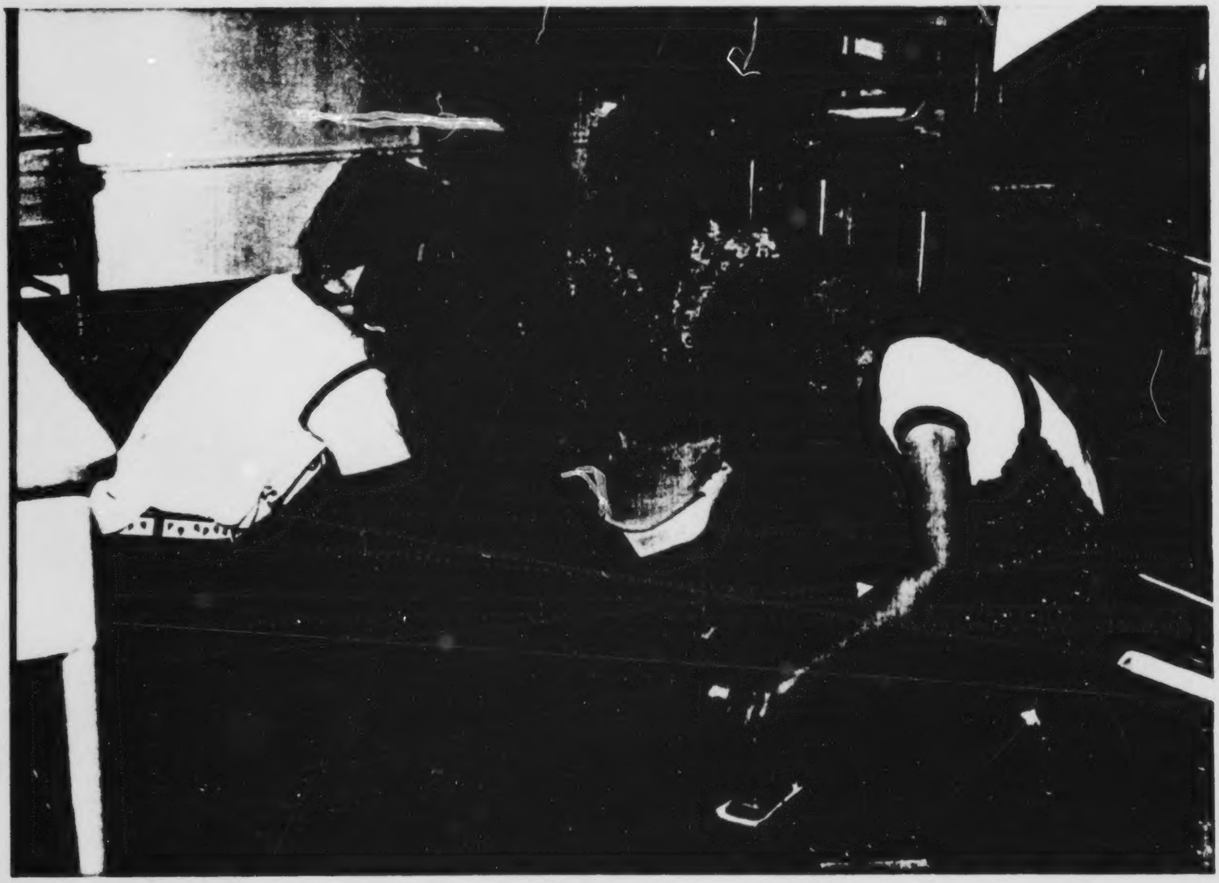
To explain how trade restraints affect the flow of international trade.

Lesson 10 - TRADE-OFFS OF TRADE

To explain how scarcity affects economic decision making.

To identify alternate economic policies relation to foreign trade and choose among these alternative policies.

To understand that every choice incurs opportunity costs.



Students playing a game another student created
about international trade

KARINTA UNIT

LESSON PLANS

THE KARINITA AND ITS OWNER

Objectives:

The students will be able to:

Collect information from a variety of sources (interviews, field trips, frilms, letters, brochures, speakers).

Present information they gathered in an interesting way.

Explain how the people associated with an auto liner specialize.

Describe how competition exists between ports and auto liner companies.

Materials:

None for the introduction, but students will gather their own for the rest of the lesson.

Procedure:

1. After the class has decided to adopt the auto liner, ask the students to think of all the things they would like to know about the Karinita and Hoegh-Ugland Auto Liners, the company that owns the ship.
2. Write all their questions on the board.
3. Ask the class how they might go about finding the answers to all the questions.- Should they each attempt to find the answers to all the questions or should they work in groups and divide up the questions?
4. Assuming they would rather work in groups, with the help of the class, organize the questions into categories. (See following page.) Assign each group a different category.
5. Discuss what are some of the various ways information can be gathered. (Booklets, brochures, interviews, films, maps, letters of inquiry)
6. Tell the class for the next couple of weeks they are going to work in groups and when they find the answers to their questions, they are to present the information they found in an interesting way.

Size of the Ship

How big is the ship?

- How long is it?
- How wide is it?
- How deep is it?
- How much does it weigh?
- How many cars does it hold?

Building the Ship

Who built the ship?
Where was it built?
When was it built?
How long did it take to build?
How much did it cost?

The Crew

How many are in the crew?
What are some of the different kinds of jobs they do?
What qualifications do you need for the different jobs?
Do you need special training to be a member of the crew?
Are there any women in the crew?
What's it like living on a ship?
How often do you see your family?
Have you had any unusual experiences on board ship?

The Ship's Journey

What ports do you visit?
What are your favorite places?
How long does it take to cross the Atlantic?
How fast does the ship travel?
How much fuel is used?
What are some of the dangers you face in your travels?

The Company

How did the company get its name HUAL?
How many ships do you have?
How did you name the ship?
How do you keep track of where the ships are?
How do you keep track of the cars on the ships?
Do you have any competition?
Why should people ship with your company?
Why did you choose the port of Wilmington to visit?

The Port of Wilmington

Why should ships use Wilmington as a port?
How often do the car carriers come?
How many cars do they bring and how many do they take?
Do the ships just carry cars?
Who loads and unloads the cars?
What is done with the cars after they are unloaded?

FACTORS OF PRODUCTION

Objectives:

The students will be able to:

State the factors of production and give a verbal definition of each.

Draw a picture with a written caption explaining what people, tools, and raw materials working together are needed to produce a car.

Materials:

Picture of a car.

Procedure:

1. Display a picture of a car. Ask the class, "Since we have been talking about an auto liner and all the cars it holds, do you know all the different people and things that are needed to produce a car?"
2. Write the word RESOURCES on the board. Explain that all the people and things are all resources needed to produce a car.
3. Ask the class to start listing all the resources they can think of that are needed to manufacture a car. Write them on the board.
4. When the list of RESOURCES is complete, ask the class if they can classify the items into categories. (For example, which items are alike?) Place them under the headings: LAND, LABOR, CAPITAL.
5. Ask the class for a definition for each term. The definitions should be similar to the following:

   land - resources consisting of sunshine, products of the land, and land
   labor - resources consisting of human manpower
   capital - resources which include buildings, tools, equipment, and machines

   If the students have difficulty grouping the resources, point out that some resources deal with people, some with tools and machines and some with raw materials. Ask which ones deal with people? List them on the board. Do the same for tools and raw materials. Place the appropriate headings above each list and ask the class for definitions.
6. Then, to review, erase the board and have students make a poster describing the resources needed to produce a car.

PORT OF WILMINGTON UNIT

LESSON PLANS

PORT DEVELOPMENT

Objectives:

The students will be able:

To describe the factors necessary for an active, economically successful port.

To identify as to presence or absence of the above factors at various locations along the Eastern Seaboard.

Materials:

Physical map of the United States
Population map of the United States
Railroad and highway map of the United States
List of major ports
Reading: Port Development - Eastern Seaboard

Procedure:

1. Divide the class into groups and distribute a set of United States maps and list of major ports to each group. The set should include physical, population, railroad, and highway maps. List of Ports: Boston, Philadelphia, Baltimore, New York, Oakland, Seattle, New Orleans, and Chicago.

2. Ask each group to locate the ports and answer the following:
   What factors do all of these ports have in common? (natural harbors, railroad, highway and/or river transportation systems, population centers)
   Have a representative from each group write the lists on the board.

3. Pose the following question:
   Based on this information, what generalization can be made concerning factors that are necessary for successful port development?
   (Most successful ports have protected, natural harbors, transportation access inland and population centers large enough to provide a labor supply and auxiliary services)

4. Distribute the reading "port Development - Eastern Seaboard", and discuss the following questions:

1. Why were ports and water transportation important to the economic development of America prior to the opening of the West?
(Only efficient, inexpensive means for transportation of goods; communication among the states)

2. What effect did the opening of the West have on port development?
(Port cities established inland routes in an attempt to expand trade and become competitive.)

3. How did each of the following ports obtain inland access? New York, Hampton Roads, New Orleans, Philadelphia, Baltimore, Richmond, and Charleston?

4. What factors contributed to New York becoming the leading United States port?
(Natural harbor, inland water transportation, railroads, and labor supply)

5. How did expansion and penetration of railroads from the eastern coast to the Midwest affect the Atlantic and Gulf coastal ports? How did the ports handle this problem?
(Competition for trade with the Midwest increased. To become competitive and attract businesses, ports lowered rates, provided additional services, improved facilities, and instituted new technological developments.)

6. Summarize the factors that attributed to port development in the United States.
(good harbor and land facilities, transportation access to the interior lands, labor supply, competitive services and rates, improved facilities, technological advancements, and auxiliary services)

PORT DEVELOPMENT

Eastern Seaboard

Before the opening of the West, American ports did not compete with one another. Land transportation was difficult and costly. Because water transportation was cheaper and easier, Atlantic seaboard states relied on it for the exchange of goods with each other through coastal shipping and inland waterways. Using these waterways, each developed its own connection with the interior lands. Since land transportation was difficult and not used for transporting goods commercially, these inland water routes seldom overlapped.

New York was the leading United States port served by regularly scheduled sailing ships. It had a natural harbor, a large labor supply and a good inland water route via the Hudson and Mohawk Rivers and later the Erie Canal which provided a seasonal all-water route from New York to the Great Lakes. Later two railroads expanded this inland route even further.

Other ports south of New York lacked the advantage of a water route to the hinterlands. To remain competitive, they developed their own transportation facilities. Pennsylvania built canals and railroads. Baltimore constructed the Baltimore and Ohio Railroad which eventually extended to Chicago and St. Louis. Richmond had the James River. As ocean-going ships became larger, this river was inadequate and Richmond's dominance as a port declined. Hampton Roads and Charleston, South Carolina became the major southern ports. Hampton Roads had three railroads reaching the Virginia and West Virginia coalfields. Charleston had the Charleston and Hamburg system, one of America's first railroads. On the Gulf, New Orleans had the Mississippi River and a railroad network.

With the expansion and penetration of railroads from the Atlantic and Gulf coasts into the Midwest during the late 1800's, all coastal ports were in competition with one another for the trade with the interior United States. Each attempted to attract business by lowering rates, providing better and more services as well as constantly improving facilities and instituting technological developments.

This competitiveness among ports exists today. Because of the number of U.S. ports, each continually attempts to attract new business by improving the port's physical structures or offering new facilities and equipment. Maintaining a competitive edge plays an important role in the future of a port's growth and development.

THE HISTORY OF THE PORT OF WILMINGTON

Objectives:

The students will be able to:

List ways ports have had to adapt to remain competitive.

Speculate on what Wilmington did to make its port the facility it is today.

Materials:

Reading: Port Development - Wilmington
Reading: Wilmington's Port Prior to 1900
1922 Brochure, "The Port of Wilmington"

Procedure:

1. Distribute the reading "Port Development - Wilmington". Have the students answer the following:
   a. Originally what factors contributed to Wilmington's port development and industrial growth?
   (good harbor facilities, high non-swampy land for warehousing, and navigable rivers for inland water transportation)
   b. Why was Wilmington's port never as successful as Philadelphia's?
   (Philadelphia built canals and railroads and its population grew large.)

2. Distribute the reading "Wilmington's Port Prior to 1900". Have the students answer the following:
   a. By 1900 what was the condition of Wilmington's port?
   (It was in sad shape. The channel was filling up and no one was willing to invest in improvements.)

3. Distribute copies of the 1922 brochure put out by the Board of Harbor Commissioners and explain this advertisement was distributed to explain the advantages of Wilmington's new marine terminal to those who might utilize it and to the citizens of Wilmington. Ask the students to read the brochure and answer the following:
   a. What advantages did Wilmington's marine terminal have to offer prospective shipping customers?
   b. What did the city have to offer?
   c. How would the terminal affect the economic development of the city?
   d. How would this terminal benefit Wilmington? Areas outside the city?
   e. What would you say was the reason for building the terminal?
   f. What do you think Wilmington has done since 1923 to maintain a competitive port?

PORT DEVELOPMENT

Wilmington

Wilmington had many factors necessary for a shipping port. Harbor facilities, high non-swampy land for warehousing and navigable rivers for inland water transportation made Wilmington a good port location. But it was overshadowed by Philadelphia. To remain competitive with and attract trade from New York, Philadelphia initiated major transportation innovations such as railroads and canals. In addition, Philadelphia's population grew to city proportions while Wilmington remained a small town. Thus regional trade developed to the advantage of Philadelphia and Wilmington's regional port activity was all but eliminated.

When businessmen from Maryland, Delaware, and Pennsylvania proposed a railroad connecting Baltimore and Philadelphia via Wilmington, Wilmington's businessmen enthusiastically gave their support in hopes of increasing the city's importance in trade. Industry, trade and population in Wilmington did grow. By the 1860's Wilmington's large scale producers were located between the navigable waters of the Christiana and the Pennsylvania, Wilmington and Baltimore Railroad (PW & BRR).

Wilmington's port never gained the activity that its neighboring ports to the north or south did but it did play a role in Wilmington's growth. It was large enough to provide raw materials for the manufacturers but not so large as to occupy large areas of land for auxiliary services that were needed for the manufacturing facilities.

WILMINGTON'S PORT PRIOR TO 1900

Wilmington's harbor is at the mouth of the Christina River. Like other ports on this river, Wilmington was hurt by the opening of the Delaware Chesapeake Canal. In addition it was overshadowed by the bigger, more active ports of Baltimore and Philadelphia. The city's leading industrialists wanted to obtain trading advantages over these two ports but were unwilling to put forth the necessary financial resources for harbor improvements.

The failure to make these improvements for further port development made competition for overseas trade impossible. Due to the river's tidal swamps and the dumping of city refuse into the port's channel, the Christina began filling up. This slowed trade and placed limitations on the size ships that could use the harbor and that could be built at Wilmington's shipyards. Consequently, most trade came to the port by coastal vessels using river barges carrying such items as coal, lumber and iron.

Today Wilmington is an active port. Of the world's more than 2,000 ports, only 200 handle more than a million tons of cargo a year. Wilmington is one of the 200.

What do you think could have happened to transfer Wilmington's mediocre port into what it is today?

It means more houses,

It means no vacant apartments,

It means better schools and more school buildings,

It means increased values along the whole line.

It means a greater market for the products of the eninsula.

It means more farms and better farms.

It means more roads and better roads.

It means more mails and better service.

It means *OPPORTUNITY*

It means *PROGRESS*

It means *ALL-TO-GETHER*
PULL-TO-GETHER

IT MEANS BUSINESS

BOARD OF HARBOR COMMISSIONERS
MARINE TERMINAL BUREAU

MAY 22, 1922.

The
Port of
Wilmington
Delaware

Wilmington
I nvites
L ocation of
M anufacturing
I ndustries
N umerous
G ood
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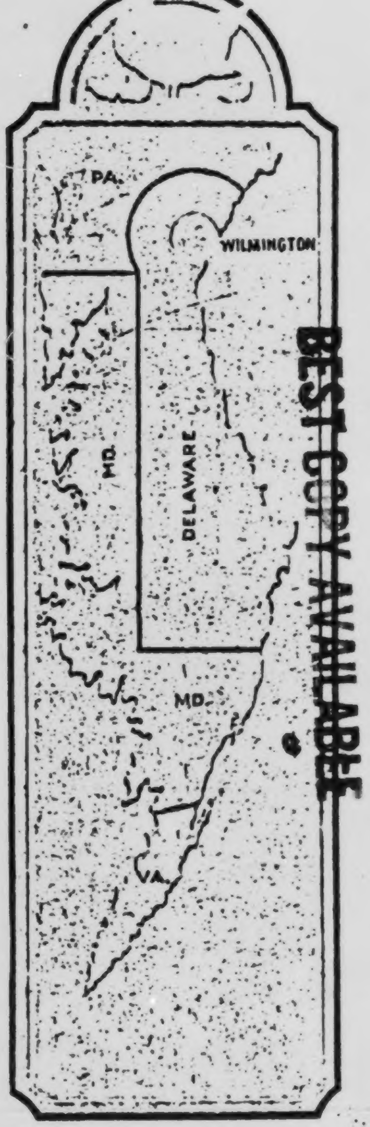

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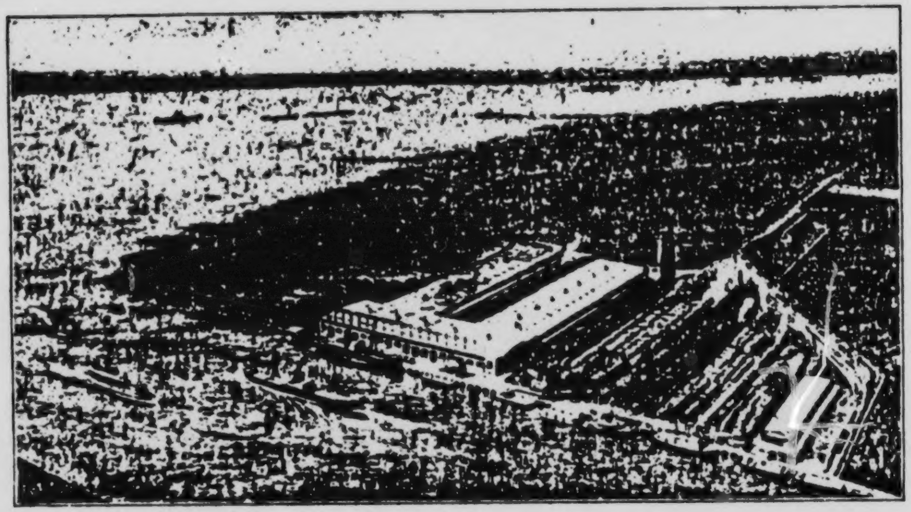
The PORT OF WILMINGTON, DELAWARE



THIS IS THE INITIAL UNIT OF THE NEW MARINE TERMINAL

Now being built by the City of Wilmington at a cost of $2,500,000.

It is on a thoroughly-protected harbor at the junction of the Delaware and Christiana Rivers. Depth of water, 25 feet at extreme low tide.

It provides 1210 feet of quay wall landing space.

Note the open storage yards for heavy materials, capacity, 45,000 tons, the warehousing facilities, both transient and permanent; and the arrangement for transferring freight from water, rails, and motor trucks.

Three trunk line railroads: Baltimore & Ohio R. R., Pennsylvania R. R., and Philadelphia & Reading Railway, connect direct with terminal tracks.

The Delaware State Highway Department is reconstructing Christiana avenue from city center to the terminals.

The Terminal will be ready for business January 1, 1923.

WHAT DOES THIS MEAN TO YOU?

BEST COPY AVAILABLE

It means that you are, in the erection of *WILMINGTON MARINE TERMINALS*, but taking advantage of nature's gift of a most logical location for it.

It means that you realize you cannot ignore the demands and needs for future progress and expansion of your City.

It means that A. D. 1922, is the year of *LIGHT*.

It means that in full operation the approximate tonnage handled at the Terminal will amount to 400,000 tons.

It means that to handle that tonnage would involve expenditure of approximately $180,000.00 annually in payrolls.

It means that out of this liquid capital approximately every cent will remain in Wilmington and progressively will be expended on the following ratio:

Food 25% ; Shelter 22% ; Clothing 18%; Heat & Light 14% ; Insurance and Saving 11%; Recreation 10%.

It means that to transport this tonnage would require 80 ocean-going vessels averaging 5000 tons D. W. each, and 25,000 ordinary freight cars—averaging about 16 tons each.

It means that incidental to the Terminal, and because of it, specific industries and manufacturing plants will seek locations in Wilmington.

It means that Wilmington will possess a wider diversification of industries which will tend to keep her people employed 365 days a year.

It means for every additional industry brought in that for every 1,000 employees the population will increase by approximately two and one-half that number.

WILMINGTON

IS A MODERN, PROGRESSIVE CITY

IT HAS

A School System Worth Over $3,000,000

A Municipal Water System Valued Over 2,500,000

A Library of 90,000 Volumes.

A 4-Platoon Police System.

A 2-Platoon Fire System Entirely Motorized.

Eleven Building and Loan Associations.

Adequate Office Buildings.

One Hundred and Fifteen Churches.

Excellent Hotel Facilities.

Three Well-Equipped Hospitals.

Over Fifteen Theatres.

Three Daily Newspapers, One Sunday Newspaper.

Several Weekly and Monthly Journals.

Eight Commercial and Two Savings Banks.

Close to 600 Acres Devoted to Park Purposes.

One Hundred and Sixty-Seven Miles of Streets.

An Area of Twelve Square Miles.

Two Hundred Miles Hard Paved Roads in the State of Delaware.

A Population of 110,000

Adjacent Residential Districts Outside of City Limits 5,000

Outlying Industrial Centers, Approximately 50,000

Making a Total Urban and Tributary Population of 165,000

Temperature Averages 66 Degrees in Summer,
40 Degrees in Winter.

One Hundred and Eighty-Five Passenger Trains Arrive and Depart From Wilmington Daily.

Do You Know?

Do you know that during the year 1920 Delaware's three counties produced from the farms:

Poultry valued at	$ 1,215,000
Eggs and Chickens valued at	1,180,000
Cattle valued at	3,500,000
Dairy Products valued at	2,442,253
Horses valued at	2,172,000
Mules valued at	1,161,000
Total	$11,670,253

Do you know that the total number of all farms in Delaware is 10,140

and that the total value, including all farm property, was in 1920 .... $80,137,614

The average value per farm .... $7,903.

The average value of items above was .... $1,150.

Do you know that Delaware raised during the same period from 60% of its farms
TOMATOES valued at ... . $1,213,000.

That she raised 4,056,028 quarts of strawberries; 270,000 quarts of blackberries; 27,000 quarts of raspberries, as well as 1,445,121 pounds of grapes?

And potatoes

Do you know that Delaware harvested in the period mentioned 733,746 bushels of sweets and 488,000 bushels of white potatoes?

Best of all do you realize that Delaware is the state that excels in the quality, beauty and *flavor* of its apples? 606,286 bushels were harvested in 1920 as well as 227,375 bushels of our famous peaches.

Do you know that 75% of all of the land area of the state is in farms, and that 79% of that is *improved?*

Do you know that what is true of Delaware is equally true of the Delmarvia Peninsula as a whole?

Do you know that the implements and machinery to work these farms was valued in 1920 at $6,781,318?

Let us *work* and *work hard* to retain this prestige.

LOCATION OF THE PORT OF WILMINGTON

Objectives:

The student will be able:

To locate the port of Wilmington on a map.

To describe the geographic location of the port, including the latitude and longitude.

Materials:

Map of the United States
"Port of Wilmington" booklet

Procedure:

1. Distribute the United States maps. Have the students locate Wilmington and give the latitude and longitude.
2. Distribute the "Port of Wilmington" booklet. Have the students locate the port on the maps in that booklet.
3. Ask the students to read from the booklet the description of the location of the port. Discuss why this is a good location for a port.

   "The Port of Wilmington is located on the Christina River where it meets the Delaware. It is just 65 miles from the Atlantic Ocean. It is the first inbound port in the Delaware River."

COMPETITIVE SERVICES AND RATES

Objectives:

The students will be able:

To predict how a change in the supply or the demand for a product affects its price.

To explain how supply, demand, price and quality of service determine whether a producer will realize a profit.

To explain how competition affects price.

To list those things a port must do to remain a profitable port.

To list the kinds of fees charged at the Port of Wilmington.

Materials: Supply and Demand worksheet
Competition worksheet
List of fees from the Port of Wilmington

Procedure:

1. To establish the relationship between supply and demand and the price of services at a port, present the following situations to the students:

Situation I. A port has four docking berths. Ten ships want to use them. Will the price for using these berths increase or decrease and why?
(The demand for docking berths (10 ships) is greater than tha available supply (4 docking berths). When demand is greater than available supply, the price rises until quantity supplied equals the quantity demanded. In this case the price continues to go up until six of the ten ships decide at that price a docking berth isn't worth that price and go elsewhere.)

Situation II. A port has four docking berths. Only two ships use them. To attract more ships to the port, will the price for using these berths increase or decrease and why? (Supply exceeds demand and the price drops.)

Situation III. A port has four docking berths. Two are being repaired. Six ships want to use them. Will the price for using these berths increase or decrease and why? (Demand exceeds supply and the price goes up.)

Situation IV. A port now adds two new docking berths and has a total of six. Four ships want to use them. Will the price for using the berths increase or decrease and why? (Supply exceeds demand and the price falls.)

2. To discover the relationship between supply, demand, price, quality of services, and profit, the students can set up two play ports at the front of the classroom. Choose two students to play the roles of captains. Have them act out the following situations. After each role, the students should answer the questions that follow.

   Situation I. The ports' services are equally good. One price list says Port Services - $250; the other says Port Services - $100. Question: Which port will have more customers and why? Discuss the types of services a ship must pay for when it docks at a port.

   Situation II. The prices change. Both ports charge $200. A ship's captain at the first port says he has received good service; a captain at the second port complains that he received very poor service and was delayed in getting out of port. Question: Which port will have more customers and why? Discuss what things a port could do to offer better services.

   Situation III. Docking services at the first port $250; at the second port they cost $200. The first port has five customers; the second has ten. Question: Which port will earn more profit, if both have the same expenses and why?

   Situation IV. One port is marked: Closed - Gone Out of Business. Its old sign is still up: Docking Services - $225. Question: Why do you think the port closed?

   Situation V. One port is still closed. The other is open, but now the price for docking services has increased to $300. Question: Why do you think the port raised its price.

   Review all the situations. Ask the students what factors determine whether a port will realize a profit.

   Ask the class that since it is important for ports to be competitive, what things should a port do to keep the port a growing and profitable one?
   (Offer more services and facilities, good quality services, new equipment using the latest technology, and advertise.)

3. Tell the students that the Port of Wilmington has 6 berths. Then brainstorm with them the kinds of fees they think the port would charge. After all their ideas have been exhausted, share with them the fees listed on the following page. Make sure they know the difference between dockage, wharfage, and demurrage.

THE PORT OF WILMINGTON FEES

Handling Lines

Handling lines covering the docking and undocking of vessels: $95 per vessel.

Dockage

Dockage is the charge assessed against self-propelled and non-self-propelled vessels and barges for berthing at the wharf, pier, bulkhead structure or bank for the purpose of loading or discharging or handling cargo.

A. Self-propelled

Working status - 19¢ per net registered ton per calendar day, with a minimum charge of $495 per day

Idle status - 13¢ per net registered ton per calendar day with a minimum charge of $385 per day

B. Non-self-propelled

Lash barges - $22 per day

Barges up to and including 200 feet - $137 per day

Barges 201 feet or greater - $264 per day

Wharfage

Wharfage is a charge assessed against the vessel on all cargo passing or conveyed over, onto, or under wharves or between vessels (to or from barge, lighter, or water) when berthed at wharf.

Wharfage is solely the charge for the privilege of receiving cargo for a vessel or for loading or discharging cargo to or from the vessel while docked at the wharf.

A. General Cargo, including dry and liquid bulk	$1.45/N.T. or Measurement Ton of 40 cu. ft., whichever is greater
B. Dry bulk in Excess of 3,000 N.T.	$.61/N.T.
C. Import/Export Automobiles & Tractors	$2.81/vehicle
D. Light trucks	$4.68/vehicle
E. Heavy trucks	$12.00/vehicle

Free Time and Wharf Demurrage

Free time is the specified period during which cargo may occupy space assigned to it on Terminal Property before wharf demurrage or Terminal storage charges apply.

Demurrage is a charge against cargo remaining in or on Terminal facilities after the expiration of free time, unless arrangement have been made for storage.

Free Time

General Cargo	5 days
Refrigerated cargo	determined by commodity
Woodpulp	15 days
Lumber	10 days
Automobiles	None
Dry Cargoes in Bulk	None
Liquid Cargoes in Bulf	None
Cocoa Products	10 days

Wharf Demurrage Rates

Covered areas

first 5 calendar days	13¢/cwt. gross
second period of 5 days	26¢/cwt. gross
third and each succeeding 5 days	40¢/cwt. gross

Open areas

first 5 calendar days	12¢/cwt. gross
second period of 5 days	14¢/cwt. gross
third and each succeeding 5 days	15¢/cwt. gross

Truck Loading and Unloading

Full loading or unloading	$ .88/100 lbs.
Tailgate	$ .50/100 lbs.

Railroad Carloading and Car Unloading

Loading or unloading of bulk freight to or from cars: $9.25/ton

Equipment Rental

Cranes	$135 per hour
Clam shell buckets	$14.50 per hour
Forktrucks	$44.00 per hour
Bulldozer	$52.00 per hour
Dump Truck, Sweeper, & Water truck	$27.50 per hour

Fresh Water

Fresh water will be supplied to vessels during working hours at $50 per connection, plus $. 66 per net ton (239.65 gallons per ton).

* The above rates are by no ways complete. For a more detailed list, see the booklet "General Tariff - Rates, Rules & Regulations" published by the port.

SUPPLY AND DEMAND

Situation I. A port has four docking berths. Ten ships want to use them. Will the price for using these berths increase or decrease? ____________________ Why?____________

____

____

____

Situation II. A port has four docking berths. Only two ships use them. To attract more ships to the port, the price for using these berths will increase or decrease? ________________

Why? ____

____

____

____

Situation III. A port has four docking berths. Two are being repaired. Six ships want to use them. Will the price for using these berths increase or decrease? ____________________

Why? ____

____

____

____

Situation IV. A port now adds two new docking berths and has a total of six. Four ships want to use the. Will the price for using the berths increase or decrease? ______________________

Why? ____

____

____

____

COMPETITION

Situation I. There are two ports - Port A and Port B. The ports'services are equally good. Port A's price list says: Port Services - $2.50; Port B's price list says: Port Services - $1.00. Which port will have more customers? _________ Why?

Situation II. The prices change. Both ports charge $2.00. A ship's captain at Port A says he has received good service. A captain at Port B says he received very poor service and was delayed in getting out of port. Which port will have more customers? _____ Why? _____________________

Situation III. Docking services at Port A cost $2.50. At Port B they cost $2.00. Port A has five customers. Port B has ten customers. Which port will earn more profit, if both have the same expenses? _____ Why? _____________________

Situation IV. One port is marked: Closed - Gone Out of Business. Its old sign is still up: Docking Services - $2.25. Why do you think the port closed? _____________________

Situation V. One port is still closed. The other is open, but now the price for docking services has increased to $3.00. Why do you think the port raised its price? _____________________

TRANSPORTATION ACCESS INLAND

Objective:

The student should be able:

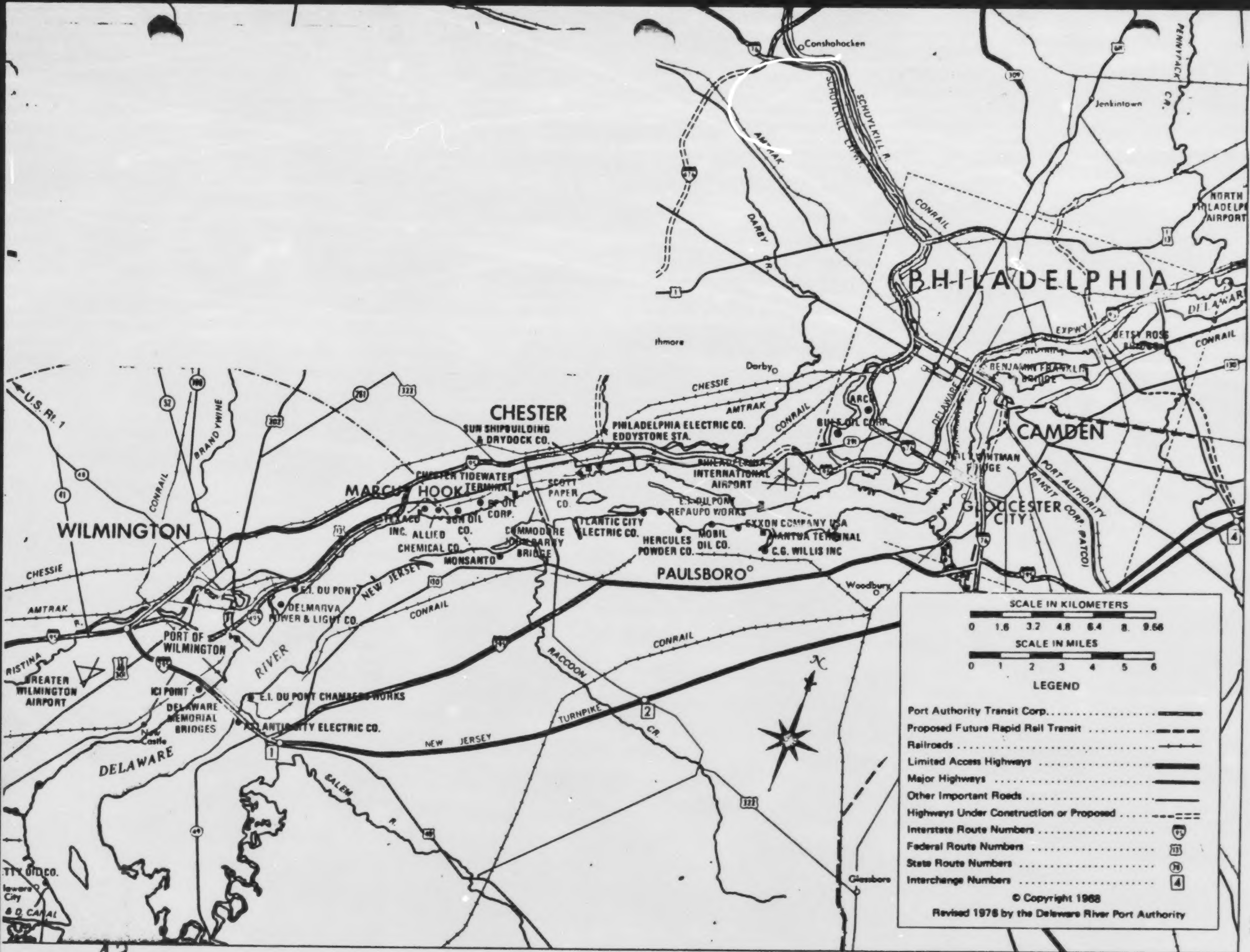
To identify and locate the roads and railroads servicing the Port of Wilmington.

Materials:

Map of the Port of Wilmington and surrounding area

Procedure:

1. Review with the students that most successful ports have transportation access inland. Ask if anyone knows how goods get to and from the Port of Wilmington.
2. Distribute the map of the Port of Wilmington and surrounding area. Have the students identify and mark in color I-95 and I-495. Have the students identify and mark in a different color Penn Central RR, the Chessie System, and the Reading. Tell the class the Port also has 7½ miles of railroad track of its own to move goods around the port.


Conshohocken
SCHUYLKILL R.
SCHUYLKILL EXPWY
Jenkintown
PENNYPACK CR.
AMTRAK
CONRAIL
DARBY CR.
NORTH PHILADELPHIA AIRPORT
PHILADELPHIA
DELAWARE
EXPWY
BETSY ROSS BRIDGE
BENJAMIN FRANKLIN BRIDGE
thmore
Darby
CHESSIE
ARCO
GULF OIL CORP.
CAMDEN
WALT WHITMAN BRIDGE
PORT AUTHORITY TRANSIT CORP. (PATCO)
GLOUCESTER CITY
CHESTER
SUN SHIPBUILDING & DRYDOCK CO.
PHILADELPHIA ELECTRIC CO. EDDYSTONE STA.
PHILADELPHIA INTERNATIONAL AIRPORT
CHESTER TIDEWATER TERMINAL
MARCUS HOOK
SCOTT PAPER CO.
BP OIL CORP.
TEXACO INC.
SUN OIL CO.
ALLIED CHEMICAL CO.
COMMODORE JOHN BARRY BRIDGE
MONSANTO
ATLANTIC CITY ELECTRIC CO.
E.I. DU PONT REPAUPO WORKS
HERCULES POWDER CO.
MOBIL OIL CO.
EXXON COMPANY USA
MANTUA TERMINAL
C.G. WILLIS INC
PAULSBORO
Woodbury
U.S. Rt. 1
BRANDYWINE
WILMINGTON
E.I. DU PONT
DELMARVA POWER & LIGHT CO.
NEW JERSEY
PORT OF WILMINGTON
RIVER
CHRISTINA
GREATER WILMINGTON AIRPORT
ICI POINT
DELAWARE MEMORIAL BRIDGES
E.I. DU PONT CHAMBERS WORKS
ATLANTIC CITY ELECTRIC CO.
New Castle
DELAWARE
RACCOON CR.
NEW JERSEY TURNPIKE
SALEM R.
Glassboro
Delaware City
C. & D. CANAL
SCALE IN KILOMETERS
0 1.6 3.2 4.8 6.4 8. 9.66
SCALE IN MILES
0 1 2 3 4 5 6
LEGEND
Port Authority Transit Corp.
Proposed Future Rapid Rail Transit
Railroads
Limited Access Highways
Major Highways
Other Important Roads
Highways Under Construction or Proposed
Interstate Route Numbers
Federal Route Numbers
State Route Numbers
Interchange Numbers
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Revised 1976 by the Delaware River Port Authority

LAND RESOURCES

Objectives:

The student should be able:

To define land resources.

To identify and list land resources at the Port of Wilmington.

Materials:

"Port of Wilmington" booklet

Procedure:

1. Review the definition of land resources.
   (Land resources are resources consisting of sunshine, products of the land and the land itself.)

2. Distribute the "Port of Wilmington" booklet. Ask the students, either individually or in partners, to list all the land resources of the port.

3. Compile a master list of all the land resources at the port. The list should include:
   - Natural protected harbor.
   - Depth alongside of dock - 37'
   - Turning basin can accomodate 650' vessel
   - Tide range - 5½' low to high water
   - Land - over 2 million square feet of open storage area
   - Good weather conditions - generally moderate climate; some freezing precipitation in winter, but not a lot of ice in river.

   Discuss each resource as it is listed, having each student tell why that item was listed.

LABOR RESOURCES

Objectives:

The student should be able:

To define labor resources.

To explain how the production process at a port is carried on most efficiently when productive resources are specialized.

To list costs and benefits of specialized division of labor.

To list some of the different specialists at the port.

To make general statement about the results which could be expected if certain specialists at the port did not come to work.

Materials:

50 copies of "Division of Labor" sheet
Glue
Scissors
Pencils
Paper with block design

Procedure:

1. Divide the class into three groups and give each group a different version of the story below. Ask each group to decide how to act out the story for the other two groups.

Version A

The manager of the Port of Wilmington hires three people to load and unload ships that dock at the port. None of these people have any experience loading and unloading ships. At the end of the day the manager has received many complaints. The captain of the first ship complains it took too long to load the ship with cars and that some of the cars were damaged. The second ship was full of lumber. The buyer of the lumber complained about the way it was unloaded and stacked in storage. In addition, the brakes on the forklift truck used to move the lumber were ruined.

Version B

The manager of the Port of Wilmington hires two longshoremen to load and unload ships and one forklift operator. All three are experienced workers. They all come to work at 7:00 a.m. and leave at 3:00 p.m. The two longshoremen and forklift truck operator sit and wait until 10:00 a.m. when the first ship is ready to be loaded.

While the longshoremen get to work, the forklift operator waits. At 2:00 p.m. the cars have been loaded and the lumber has been unloaded. The lift truck driver goes to work moving the lumber to storage. The longshoremen sit and watch. No customer complaints.

Version C

The manager of the port hires two longshoremen and a forklift truck operator. All are experienced workers. The longshoremen come to work at 10:00 a.m., load one ship with cars, unload one ship with lumber, and go home at 4:00 p.m. The forklift truck driver comes to work at 3:00p.m., moves the unloaded lumber to a storage area and goes home at 7:00 p.m. There are no customer complaints.

After the groups have acted out their scenes, discuss the following:

A. Why were there lots of problems in the first scene? (Lack of training, no experience, workers were not specialists, and their work was of poor quality)

B. How did the situation improve in the second scene? (Specialists were hired.)

C. There was still a problem. What was it? (The workers did not use their time very well. One specialist sat while the other two worked and vice versa.)

D. How was the problem corrected in the third version? (The longshoremen came first, then the forklift truck operator. People and time were used more efficiently. Same amount got done with same number of people using their time better.)

E. Why is it better to hire a specialist in the production process?

F. What would happen at the port if one of the specialists did not come to work?

2. Set up two teams. One team forms an assemblyline with each child assigned a specific task; the other team works as individuals. On the nonspecialized team, each child must do all the work by himself. Have one completed ship on display. On the other team, members specialize in one task of the production process (cut out ship, cut out smokestack, paste on smokestack, draw 4 portholes, write the name of the ship in the upper left comrner of the ship, draw on anchor). Have them look at the completed ship to decide how to specialize. As each team finishes the production of a specified number of ships, record the time on the board.

Lead a discussion of the advantages and disadvantages of specialization. It should focus on the advantages in terms of increased output, saved time, improved skills, quality of product, and disadvantages of boredom, repetition, and interdependence.

3. Discuss the following:

   A. Is division of labor used in your house? How? What special tasks do you do in the house?

   B. Which special tasks are undertaken in our classroom and the school building? Which specialized worker performs these tasks?

   C. We have been studying the port. Do you think the port has specialists? Why?

   D. Who are some of the specialists at the port? (List responses on the board.) Discuss each one in terms of his/her job responsibilities at the port. Show transparency of Port of Wilmington organizational chart. Talk about the different jobs. Read job descriptions of unfamiliar jobs.

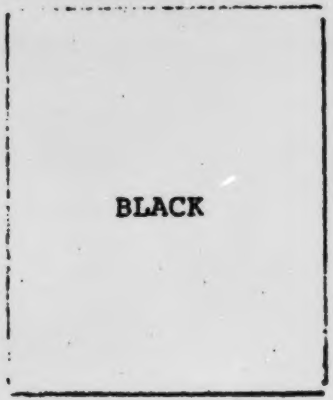
   E. Assign each student the task of drawing a picture of one of the various specialists at the port and to write a sentence or two about what this specialist does. When finished have them glue them to a box which they have cut out of construction paper. Stack the boxes to form a wall. When everyone is finished, review the various specialists and what they do. Emphasize how others at the port depend on each specialist. Discuss what the consequences might be if one of the specialists was not dependable or didn't do a ggod job. Illustrate by removing key boxes so the wall will fall down. Review with the students that specialization leads to greater independence. With many people performing various tasks at the port, each must do his/her job if the port is to run smoothly and efficiently.

Clerk
Typist
ASST.
PORT
DIRECTOR
clerk
typist
supervisor

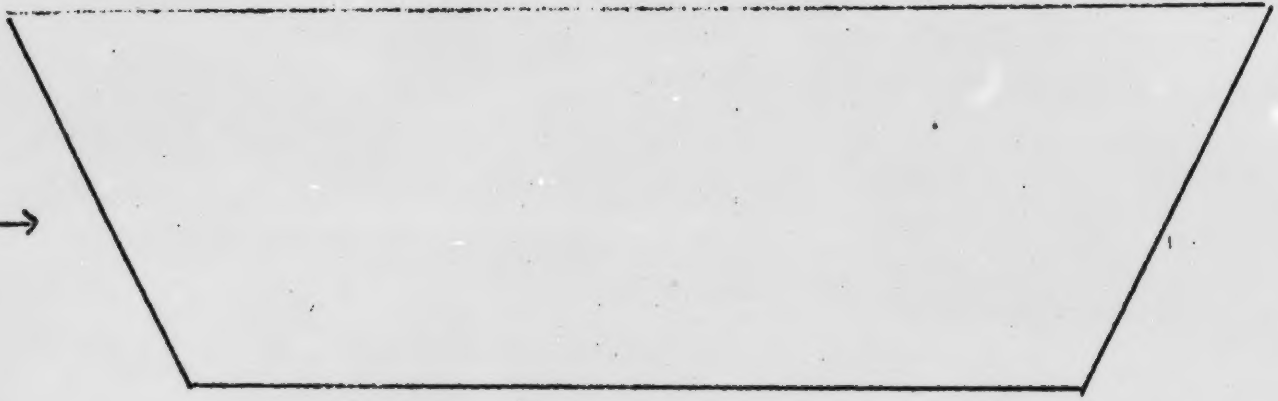
DIVISION OF LABOR

Model Pieces

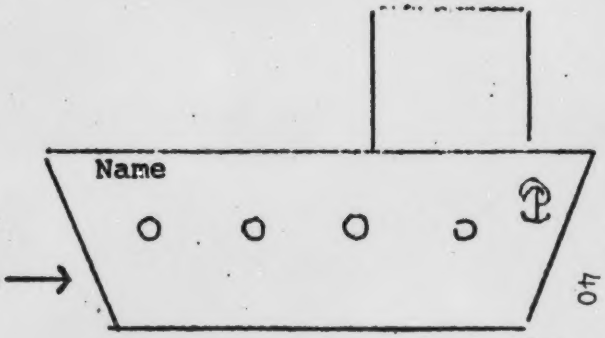
SMOKESTACK →



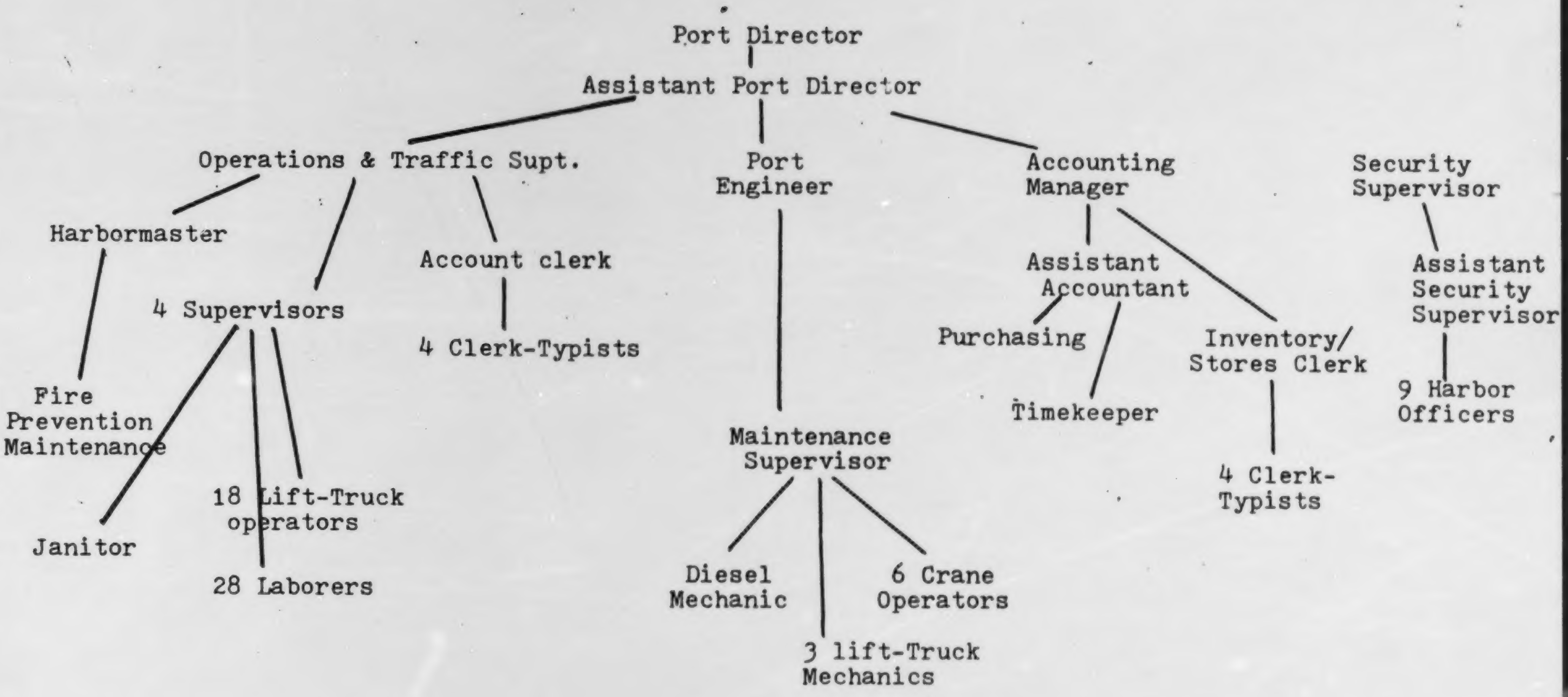
SHIP →



Finished Model should look like this. →



FINISHED MODEL


Port Director
Assistant Port Director
Operations & Traffic Supt.
Port Engineer
Accounting Manager
Security Supervisor
Harbormaster
4 Supervisors
Account clerk
4 Clerk-Typists
Assistant Accountant
Purchasing
Timekeeper
Inventory/ Stores Clerk
4 Clerk-Typists
Assistant Security Supervisor
9 Harbor Officers
Fire Prevention Maintenance
Janitor
18 Lift-Truck operators
28 Laborers
Maintenance Supervisor
Diesel Mechanic
3 lift-Truck Mechanics
6 Crane Operators

225 Longshoremen out of the Union

CAPITAL RESOURCES

Objectives:

The student should be able:

To define capital resources.

To identify and list capital resources at the Port of Wilmington.

Materials:

"Port of Wilmington" booklet

Procedure:

1. Review the definition of capital resources. (Capital resources are the resources which include buildings, tools, equipment, and machines.)

2. Distribute the "Port of Wilmington" booklet. Ask the students, either individually or in partners, to list all the land resources of the port.

3. Compile a master list of all the capital resources at the port. The list should include:
    - 3 Gantry cranes
    - 1 mobile crane
    - Rapid discharge bulk unloader
    - 26 Fork lifts
    - Multi-purpose container crane
    - Road sweeper
    - Front end loader
    - Road flusher
    - Warehouses
    - Refrigerated storage areas
    - Conveyor belt
    - Water truck
    - Bulldozer
    - Dump truck

CARGO AT THE PORT

Objectives:

The student should be able:

To give an example of how trading increases the general welfare.

To cite products that the Port of Wilmington imports and exports.

Materials:

Bag of popcorn; pint bottle of soda
World map
List of port exports and imports

Procedures:

1. To demonstrate how trading increases the general welfare, use the following situation:

   Give one student a large bag of popcorn and another student a pint of soda. Ask each student how much of his own product he can eat or drink immediately. Each may find he has too much for one sitting. Challenge them with the question, "Would you not each prefer popcorn and soda?" This will give them the idea that if each will trade his own surplus both will be better off.

2. To create awareness of the need for international trade, role play the following situation:

   Ask one student to be an American wheat farmer whose region is favorable for growing wheat but not coffee.

   Ask another student to be a Brazilian orange grower whose region is favorable for growing oranges but not wheat.

   Without going into details of international trade, ask how each could work it so that they both could have toast and orange juice for breakfast.

3. To demonstrate how the Port of Wilmington is interdependent with many countries, use the port as your center point, connect each imported product with the country and/or countries from which it comes, using one color yarn. With a second color yarn, connect each exported product with the country and/or countries of its destination.

   Review and discuss the following:
   *Why does the U.S. import items from other countries?
   *Why do other countries import products from the U.S.?
   *What would happen if the U.S. stopped importing bananas?
   *What would happen if the U.S. stopped exporting cars?
   *What if the U.S. stopped trading with all countries?

THE PORT'S EXPORTS AND IMPORTS

Imports

Bananas	Guatemala; Costa Rica
Frozen Meat	Australia
Steel	Germany
Jute products	India; Bangladesh
Cocoa products	Ivory Coast; Peru
Orange juice concentrate	Brazil
Apples	New Zealand
Eggs	Israel
Railcars	Romania
Urea	Holland
Gypsum ore	Nova Scotia
Bauxite (aluminum)	Venezuela
Lumber	Canada
Crude oil	Middle East
Cars & Trucks	France; Italy; Japan

Exports

Frozen poultry	Canary Islands
Lumber (logs)	Germany; Egypt
Coal	Rotterdam
Limestone	Venezuela
Potatoes	Venezuela
Petrolcoke	Amsterdam
Solar salt	Turkey
Soybeans	Turkey
Detergent	Middle East; Saudi Arabia
Vehicles	Middle East: Saudi Arabia; Oman, Lebanon, Quwait, Iran, Bahran

OUTSIDE FACTORS INFLUENCING PORT DEVELOPMENT

Objectives:

The students will be able to:

Explain how factors outside port control affect the economic activity at the port.

Materials:

3x5 index cards

Procedure:

1. Explain to the class that often things happen which are completely outside port control but which affect the economic activity at the port.
2. Have each student draw an arrow on a 3x5 index card. As you read each of the situations below, have the students display the arrows to indicate the direction economic activity would go. Then discuss the reasons for their answers.
   - A. increase in the price of American steel (increased activity; increase in demand for imported, cheaper foreign steel; imported steel substituted for the more expensive American steel)
   - B. decrease in the price of American beef (decreased activity; decrease in demand for imported Australian beef; the less expensive American beef is substituted for the Australian beef)
   - C. increase in price of cocoa beans (decreased activity; decrease in quantity of cocoa beans demanded)
   - D. forest fire destroys half of the U.S. lumber supply (increased activity; increased importation of lumber)
   - E. closing of Scott Paper Plant (decreased activity; decrease in demand for paper pulp)
   - F. a single plant using Wilmington's port exclusively for imports has opened new plants in other parts of country (decreased activity; imported raw materials now go directly to other plants via closer ports)
3. Ask students to summarize factors outside the port's control that affect the level of economic activity at the port. (price changes of domestic goods relative to foreign imports, and vice versa; industrial expansion, changes in demand)

4. Have the students use a thumbs up and thumbs down procedure to indicate how the following events would affect the supply, demand, and price of the imported or exported product at the Port of Wilmington.

   A. American small cars become a status symbol (demand for American cars ↑, price ↑)

   B. Severe storm almost destroys the banana crop (supply of bananas ↓ , price ↑)

   C. The U.S. supply of gypsum used to make plaster of Paris and wall board is depleted (demand for imported gypsum ↑ , price ↑)

   D. Urea is used in making plastics. U.S. car manufacturers switch from making the body of a car from metal to plastic (demand for urea ↑ , price ↑)

   E. Americans find it difficult to buy parts to repair their Fiats when they break down (demand for Fiats ↓ , price ↓)

   F. Australian beef farmers produce twice as much beef this year as last year (supply of Australian beef ↑ , price ↓)

5. Assign the class to bring in newspaper articles of events which are outside port control which might affect the economic activity at the port. Make a display of these articles.

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INTERNATIONAL TRADE UNIT

LESSON PLANS

CREDITS

Material for teaching the International Trade Unit was taken from "Trees and TV in the International Marketplace" published by the Washington State Council on Economic Education, "American Enterprise Teaching Notes", Issue 12 published by Playback Associates of New York, and "International Economics", a multi-media program published by the Federal Reserve Bank of New York.

INTERDEPENDENCE GAME

Objectives:

The students will be able:

To explain how scarcity affects economic decision making.

To identify how cooperative economic actions may benefit many people.

To explain how unequal distribution of resources influence production decisions.

To organize information and use it to predict a survival strategy in the game.

Materials:

Tally Sheet (one per student each day)
Resource point cards
Factory cards
Task sheet overhead transparencies
Debriefing worksheet

Procedure:

1. For the purposes of this game, each student represents an individual country. Almost all of the students start with equal resources - 15 points- but two have 25 points and two have 40 points. The object is for countries to earn enough points to sustain life.

2. After each student is given a square at random containing the number of resource points, he/she is asked to create a name for his/her country. Pass out tally sheets.

3. Each student participates in a work round to produce goods for trade. Like actual production in a country, the tasks are both menial and intellectual because the student is asked to respond correctly to as many questions as possible. The number of correct answers is the number of points earned for a round.

4. The task sheets can be made into transparencies and shown on the overhead to prevent cheating. Students respond on their own paper. Students are given one and a half minutes to work after you have turned on the projector. Turn the projector off at the end of the time. Correct.

5. There is a new set of tasks for each of the eight rounds. You need to read the answer key after each round of work. The students earn one point for each correct answer. They must transfer this score to their tally sheet. Exchanging papers helps eliminate cheating.

6. Students must add their resource and production points on line 3.

7. For the first round everyone's multiplier is one. If students buy additional factories for 40 points, they then multiply their scores by ten in the next two rounds. If they buy during the second round, they will use the factory multiplier only for the third round.

8. They should total their score again for line 5.

9. Now they must subtract their expenses for the year. You will give out the figures only as each round occurs, but you will notice the increase for inflation and population growth.

Expense rates	First round	15 points
	Second round	20 points
	Third round	30 points
	Fourth round	40 points

10. Students must subtract their expenses on line 6.

11. Have students again total their points on line 7.

12. The students are now given a four or five minute period for negotiotions. They are allowed to get out of their seats in order to strike a bargain. During this time students may borrow or loan points. They may also give or receive points. They can invest points with another person or persons. The two objectives are: first, to buy factories for 40 points, and second, to insure they have a positive balance at the end of the column so they can sustain life and production for another round.

13. You will have the factories on cards which are to be given out to the buyers. Be certain that all of the people who invest subtract the necessary number of points. Only the person who has the additional factories is allowed to multiply his/her score. After this is done, then the holder may share his/her output with the other owners.

14. Call an end to negotiations and ask students to put their resource points at the bottom of the column. They must have a minimum balance of 1 or they cannot continue to play. Students with negative scores cannot continue to play.

15. Go on to play rounds two and three in the same way. If time allows, you might permit students to do a fourth round.

16. If there is any time left you may allow random comments.

Day 2

17. For the second day students will begin anew. You will have to give out new tally sheets and new point slips. Do not try to give the additional points to the same people. They should be distributed at random.

18. There are no factories. They will have to be purchased for 40 points.

19. Use the same rules.

20. Before you begin, introduce the idea that the goal for the second day should be to keep as many countries alive as possible. Tell them that they should have learned some economic lessons yesterday which they can put into effect today.

21. Now you are ready for a debriefing session.

Debriefing Questions

You might begin by asking the students for general observations about the game. You should then guide the discussion so that the questions on the following page are considered.

Students should discover that scarcity is the basic economic concept. Resources are divided unequally, and nations trade in order to get the resources they need. Nations which have greater shares of the resources have an unequal advantage. Also, students should see that capital resources, which often require an investment, will ultimately increase production possibilities.

Name ____________________

INTERDEPENDENCE GAME

1. What resources did each country begin with?

2. How many countries failed to survive?

3. Of the people who did not survive, how many of them failed to invest?

4. What effect did the additional factories have on scores?

5. How does technology affect production in the real world?

6. How many people who received points as gifts needed another gift in the next round?

7. Are gifts of this type a constructive method of guaranteeing long term survival?

8. Describe the benefits of joint investment.

9. What are the costs and benefits of self-sufficiency?

10. What are the costs and benefits of interdependence?

11. What would happen if no trade was allowed in the game?

12. How did the resource-rich countries benefit from interdependence?

13. Of approximately 160 countries of the world, which 3 would be resource-rich? (40 pts.)

    Which countries have an abundance of some resources?

Most of the other countries have limited resources. Through development of technology, some of them have been able to prosper. Others barely survive. Foreign aid in the form of gifts and loans only enables the country to survive a short while longer before it needs more help. Aid in the form of technology and education seems to help a country become more self-sufficient.

INTERDEPENDENCE Tally Sheet

Student Name____________________

Country Name____________________

	ROUND ONE	ROUND TWO	ROUND THREE	ROUND FOUR
1. Resource points				
2. Enter production points	+	+	+	+
3. Add lines 1 and 2				
4. Multiply for additional factories. If none, multiply by 1. For each factory purchased for 40 points, multiply by 10.	x 1	x	x	x
5. Total after multiplication				
6. Expenses for the year	-	-	-	-
7. Subtract line 6 from line 5				
8. Negotiations A. Add points given you as a loan, gift, payment or investment. B. Subtract points given others as a loan, gift, payment or investment. C. Subtract 40 points for each additional factory purchased from teacher.				
9. Total resource points for next round. Your score must be at least +1 or your country cannot sustain life and you must cease playing.				

Factory Cards for INTERDEPENDENCE GAME

FACTORY 40 Points Only the bearer multiplies by 10	FACTORY 40 Points Only the bearer multiplies by 10
FACTORY 40 Points Only the bearer multiplies by 10	FACTORY 40 Points Only the bearer multiplies by 10
FACTORY 40 Points Only the bearer multiplies by 10	FACTORY 40 Points Only the bearer multiplies by 10
FACTORY 40 Points Only the bearer multiplies by 10	FACTORY 40 Points Only the bearer multiplies by 10

Resource Point Cards for INTERDEPENDENCE GAME

Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points
Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points
Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points
Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points
Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points	Country Name __________ 15 points
Country Name __________ 15 points	Country Name __________ 25 points	Country Name __________ 25 points	Country Name __________ 40 points	Country Name __________ 40 points

INTERDEPENDENCE GAME TASK SHEET I

1 Add the following numbers: 317 +618 _______ Total	2 Subtract the following numbers: 617 -312 _______ Total	3 Multiply the following numbers: 12 x 13 _________ Total
4 Identify the underlined word as a noun or a verb. Sally went downtown. Answer:	5 Identify the sport which uses 2 teams with eleven players and has a field which is 100 yards long. Answer:	6 The scientific symbol H_2O stands for: Answer:
7 What is the abbreviation for "revolution per minute?" Answer:	8 What is the name given to the hand-held musical instrument which utilizes a a bellows, keyboard and buttons? Answer:	9 The appendage on a human being located above the neck is called: Answer:

INTERDEPENDENCE GAME TASK SHEET II

1

Add the following numbers:

437
+ 793

________Total

2

Subtract the following numbers:

998
-117

________Total

3

Multiply the following numbers:

14
x 9

________Total

4

Identify the underlined word as a noun or adjective.

Joe has a beard.

Answer:

5

Identify the sport which uses 2 teams of five players and has a hoop at each end of the court.

Answer:

6

The scientific symbol Fe stands for:

Answer:

7

What is the correct Post Office abbreviation for "Washington"?

Answer:

8

What is the name given to a musical instrument which is hit by sticks and which has a tightly stretched material over a metal or wood frame?

Answer:

9

The appendages on a human being located at the end of the hand are:

Answer:

INTERDEPENDENCE GAME TASK SHEET III

1

Add the following numbers:

111
+999

______ Total

2

Subtract the following numbers:

872
-117

______ Total

3

Multiply the following numbers:

17
x 19

______ Total

4

Identify the underlined word as a preposition or a noun.

John is a part of the band.

Answer:

5

Identify the sport which uses skates, a puck and 2 teams with five players each.

Answer:

6

The scientific symbol O_2 stands for:

Answer:

7

What is the abbreviation for "Mister"?

Answer:

8

What is the name given to the musical instrument which has strings, rests on the shoulder and is played with a bow?

Answer:

9

The appendages on a human being located at the end of the foot are called:

Answer:

INTERDEPENDENCE GAME TASK SHEET IV

1 Add the following numbers: 237 +692 __________Total	2 Subtract the following numbers: 739 - 129 __________Total	3 Multiply the following numbers: 16 x 11 __________Total
4 Identify the underlined word as a direct object or verb. I threw the ball. Answer:	5 Identify the sport which places two people wearing soft gloves moving in a ring. Answer:	6 The scientific symbol Pb stands for: Answer:
7 What is the abbreviation for "Doctor"? Answer:	8 What is the name given to the musical instrument which has a slide and is made of metal? Answer:	9 The part of the human body which allows people to see is called: Answer:

TASK SHEET V

1 Add the following numbers: 398 + 176 ____________ Total	2 Subtract the following numbers: 198 - 101 ____________ Total	3 Multiply the following numbers: 18 x 13 ____________ Total
4 Identify the underlined word as a preposition or adjective. It is a good book. Answer:	5 Identify the sport which uses a rod and needs water. Answer:	6 The scientific symbol H stands for: Answer:
7 What is the abbreviation for "Avenue"? Answer:	8 What is the name given to the musical instrument which has a single reed, is long and usually black? Answer:	9 What part of the human body allows people to hear? Answer:

INTERDEPENDENCE GAME   TASK SHEET VI

1 Add the following numbers: 437 + 216 __________Total	2 Subtract the following numbers: 671 - 421 __________Total	3 Multiply the following numbers: 17 x 14 __________Total
4 Identify the underlined word as a conjunction or a noun. Sally and Tom sat down. Answer:	5 Identify the sport which uses a ball, paddles and a table. Answer:	6 The scientific symbol N stands for: Answer:
7 What is the abbreviation for the "Union of Soviet Socialist Republic?" Answer:	8 What is the name of the instrument which has strings and is strummed with fingers or a pick? Answer:	9 What part of the human body allows people to think? Answer:

INTERDEPENDENCE GAME TASK SHEET VII

1 Add the following numbers: 796 + 199 _______Total	2 Subtract the following numbers: 1210 - 1129 _______Total	3 Multiply the following numbers: 179 x 46 _______Total
4 Identify the underlined words as an interjection or an appositive. John, my neighbor, likes pizza. Answer:	5 Identify the sport that has 2 teams of nine players that uses a bat and ball. Answer:	6 What is the process plants use to convert sunshine into food? Answer:
7 What is the abbreviation for Doctor of Philosophy? Answer:	8 What is the name of a double reed instrument that is approximately five feet long and has a very low tone? Answer:	9 What joint connects the lower and upper arms? Answer:

INTERDEPENDENCE GAME TASK SHEET VIII

1 Add the following numbers: 126 + 829 __________Total	2 Subtract the following numbers: 1916 - 1217 __________Total	3 Multiply the following numbers: 188 x 88 __________Total
4 Identify the underlined word as an adjective or adverb. He sings well. Answer:	5 Identify the sport with two or four players that uses a racquet, ball, and a court. Answer:	6 The bodily fluid which is pumped through the heart is what? Answer:
7 What is the abbreviation for Doctor of Dental Science? Answer:	8 What is the instrument which has metal tubes suspended under wooden surfaces that are hit with sticks? Answer:	9 What joint connects the leg to the upper body? Answer:

Answers to Task Sheet Questions

Task Sheet I

1. 935
2. 305
3. 156
4. Verb
5. Football
6. Water
7. R.P.M.
8. Accordian
9. Head

Task Sheet II

1. 1230
2. 881
3. 126
4. Noun
5. Basketball
6. Iron
7. WA
8. Drum
9. Fingers

Task Sheet III

1. 1110
2. 755
3. 323
4. Preposition
5. Hockey
6. Oxygen
7. Mr.
8. Violin/Viola
9. Toes

Task Sheet IV

1. 929
2. 610
3. 176
4. Direct object
5. Boxing
6. Lead
7. Dr.
8. Trombone
9. Eye

Task Sheet V

1. 574
2. 97
3. 234
4. Adjective
5. Fishing
6. Hydrogen
7. Ave.
8. Clarinet
9. Ear

Task Sheet VI

1. 653
2. 250
3. 238
4. Conjunction
5. Ping Pong/Table Tennis
6. Nitrogen
7. U.S.S.R.
8. Guitar/Banjo
9. Brain

Task Sheet VII

1. 995
2. 81
3. 8234
4. Appositive
5. Baseball
6. Photosynthesis
7. Ph.D.
8. Bassoon
9. Elbow

Task Sheet VIII

1. 955
2. 699
3. 16,544
4. Adverb
5. Tennis
6. Blood
7. D.D.S.
8. Xylophone
9. Hip

FOREIGN TRADE SEARCH

Objectives:

The student should be able :

To define the terms: export and import.

To identify and list products in their home which were made in another country.

To identify contributions of foreign trade to our life style.

To formulate generalizations about U.S. trade with other countries.

Materials:

Debriefing worksheet

Procedure:

1. Review the terms, import and export, and the goods which the Port of Wilmington imports and exports.
2. Ask the students to make a list of the products and objects in their homes which have come from another country and list their place of origin. Ask them to go through a newspaper or magazine and find references to goods from other countries which are available in our community and list the commodities and countries. And, ask them to go through the yellow pages of the telephone book for references to foreign goods.
3. Once each student has compiled his/her own list, make a master list on the blackboard of all the products and the countries. Then distribute the debriefing worksheet and go over those questions.

   Students should realize that countries produce and trade specific goods and services. Also, they should realize we buy goods from other countries because we prefer their products over similar products produced in this country or because the product is not produced in this country.

IMPORTS

1. What country contributed the most imported goods?
2. What products purchased from other countries could have been bought in the U.S.?
3. What products would have not been available if they were not imported?
4. What products could we do without if we had to?
5. Which are necessary imports?
6. What products are more expensive because they are imported?
7. Which products are cheaper because they are imported?
8. Why do we import goods?
9. What products do we import because we don't have the necessary resources?
10. How would your life be different if the U.S. did not trade with other countries?

WORKING TOGETHER FOR COMPARATIVE ADVANTAGE

Objectives:

The student should be able to:

Identify some of the costs and benefits of interdependence.

Explain how unequal distribution of resources influence production decisions.

Materials:

Student reading: Comparative Advantage
Student worksheet: Working Together

Procedure:

1. Tell the class that in the last lesson we looked at foreign products which are available in our area. Today we will look at the process countries use to decide which goods and services to produce and which to acquire by trade.
2. Have the students read "Comparative Advantage/Working Together".
3. Individually, have students fill out worksheets.
4. Go over the actual figures for "Working Together".
5. Discuss the worksheet, using the following questions:
   - A. Which situation appears to benefit the countries most?
   - B. Which nation benefits from the trading relationship?
   - C. Which nation receives the greatest benefit?
   - D. How many total hours of work effort were saved in each example?
   - E. What productive activities might be done with the hours saved by trading?
   - F. What problems could develop for each nation with a trading relationship such as this?
   - G. If you were a member of these nations, would you continue to trade?
   - H. How can a country decide which things to produce and which to buy?
   - I. What products and services does the U. S. produce because of comparative advantage and which do we trade for?

STUDENT READING and WORKSHEET

COMPARATIVE ADVANTAGE

How do countries decide which things to produce and which to get by trade? There is generally a logical pattern which can be used, termed comparative advantage. Countries make the goods and services they can produce at the lowest costs while they trade to get things that they could produce only at higher costs.

As an example, in the United States we could grow bananas in greenhouses and wheat on our midwest plains. Costa Rica can grow bananas in the open but they would have trouble growing wheat. Therefore the United States grows wheat because we can do so at less cost. It would cost more to grow bananas, so we get them by trade. Costa Rica can grow bananas more cheaply, so they grow them and trade to get wheat. The United States has a comparative advantage in growing wheat, and Costa Rica has a comparative advantage in growing bananas. Trade benefits both countries. We can get bananas more cheaply than if we had to build greenhouses to grow the trees and Costa Rica can get wheat more cheaply.

Sometimes there is even a situation of absolute advantage where one country can produce something but another cannot. Rhodesia has an absolute advantage over the United States in the production of chromium. We have none of the natural resources, so we have to trade to get them or else we would have to do without.

The concept of comparative advantage helps explain why countries trade. They attempt to get things at the least possible cost. This also helps countries use their resources more efficiently. If we used our resources to grow bananas it would take more of them and use them less wisely than if we grew wheat. Once a country specializes in the products they produce best it becomes more efficient. Part of this is due to training of workers and part to economy of scale where it is cheaper to produce large quantities than to produce small quantities.

Reducing the process to its simplest terms, let's find out how a set of countries can decide which products to produce and which products to trade for. This is a simplified example, but it will show the process.

WORKING TOGETHER

Both nations A and B are island communities which are located very close to one another. Currently, the population of each island despises the other group. They seldom communicate with one another and when they do, they usually argue about who won a battle which took place between the two nations 600 years ago.

It is a well known fact that Nation A is better off than Nation B in every respect. It takes 8 hours of work for Nation A to grow one basket of vegetables and 9 hours of work to catch a basket of fish.

Nation B, on the other hand, is not blessed with the resources and technology found in Nation A. It takes Nation B 12 hours to grow one basket of vegetables and 10 hours of work to catch a basket of fish. Obviously, Nation B must work longer for everything it has to eat.

The foreign ministers of these countries (knowing the production possibilities of each nation) began to discuss a possible trading arrangement.

Do the following activity to determine whether a trading relationship would be beneficial. For purposes of the activity, a basket of fish is equal in value to a basket of vegetables.

Let's see what would happen if Nation A decided to specialize in fish and Nation B produced only vegetables.

I.

NATION A	NATION B
TIME SPENT BEFORE TRADING	
One basket of vegetables took ____ hours to produce	One basket of vegetables took ____ hours to produce
One basket of fish took ____ hours to produce	One basket of fish took ____ hours to produce
TOTAL ____ hours	TOTAL ____ hours
TIME SPENT AFTER SPECIALIZATION AND TRADING	
Nation A produces two baskets of fish. They keep one basket of fish and trade to get one basket of vegetables.	Nation B produces two baskets of vegetables. They keep one basket of vegetables and trade to get one basket of fish.
Total hours of effort ____ hours (2 baskets x 9 hours)	Total hours of effort ____ hours (2 baskets x 12 hours)
WOULD THIS TRADE BE BENEFICIAL?	
Before trading Nation A spent ____ hours producing a basket of fish and a basket of vegetables	Before trading Nation B spent ____ hours producing a basket of fish and a basket of vegetables
After specialization and trading they spent ____ hours to get a basket of fish and a basket of vegetables	After trading they spent ____ hours to get a basket of fish and a basket of vegetables
Did they save or lose time? (circle correct one) SAVE LOSE	Did they save or lose time? (circle correct one) SAVE LOSE
How many hours? ____ hours	How many hours? ____ hours

If the two nations reversed their specialties, it might make a difference. Let's work the problem the other way.

Now let's see what would happen if Nation A specializes in vegetables and Nation B specializes in producing fish.

II.

NATION A	NATION B
TIME SPENT BEFORE TRADING	
One basket of vegetables took ____ hours to produce	One basket of vegetables took ____ hours to produce
One basket of fish took ____ hours to produce	One basket of fish took ____ hours to produce
TOTAL ____ hours	TOTAL ____ hours
TIME SPENT AFTER SPECIALIZATION AND TRADING	
Nation A produces two baskets of vegetables. They keep one basket and trade to get a basket of fish.	Nation B produces two baskets of fish. They keep one basket and trade to get a basket of vegetables.
Total hours of effort ____ hours (2 baskets x 8 hours)	Total hours of effort ____ hours (2 baskets x 10 hours)
WOULD THIS TRADE BE BENEFICIAL?	
Before trading Nation A spent ____ hours producing a basket of fish and a basket of vegetables	Before trading Nation B spent ____ hours producing a basket of fish and a basket of vegetables
After specialization and trading they spent ____ hours to get a basket of fish and a basket of vegetables	After trading they spent ____ hours to get a basket of fish and a basket of vegetables
Did they save or lose time? (circle correct one) SAVE LOSE	Did they save or lose time? (circle correct one) SAVE LOSE
How many hours? ____ hours	How many hours? ____ hours

This demonstrates that if nations specialize in the things they do at the least cost and trade for the things that take more time and money, they can benefit. This situation is true even when one country, like Nation A, is better at producing all products.

What could be some disadvantages of specialization as a basis for trading? Some countries feel that they must produce most of their own essential products and services so that during time of war they will not suffer shortages. Also some countries argue that their workers would be displaced, at least temporarily, if certain things were acquired only through trade. Both of these arguments are used frequently.

Other people argue that the use of comparative advantage is the way to use resources most efficiently.

All countries must decide for themselves whether the costs and benefits of specialization outweigh the costs and benefits of self-sufficiency.

ANSWER KEY for WORKING TOGETHER

I.

NATION A	NATION B
TIME SPENT BEFORE TRADING	
One basket of vegetables took 8 hours to produce	One basket of vegetables took 12 hours to produce
One basket of fish took 9 hours to produce	One basket of fish took 10 hours to produce
TOTAL 17 hours	TOTAL 22 hours
TIME SPENT AFTER SPECIALIZATION AND TRADING	
Nation A produces two baskets of vegetables. They keep one basket and trade to get a basket of fish.	Nation B produces two baskets of fish. They keep one basket and trade to get a basket of vegetables.
Total hours of effort 18 hours (2 baskets x 8 hours)	Total hours of effort 24 hours (2 baskets x 10 hours)
WOULD THIS TRADE BE BENEFICIAL?	
Before trading Nation A spent 17 hours producing a basket of fish and a basket of vegetables	Before trading Nation B spent 24 hours producing a basket of fish and a basket of vegetables
After specialization and trading they spent 18 hours to get a basket of fish and a basket of vegetables	After trading they spent 24 hours to get a basket of fish and a basket of vegetables
Did they save or lose time? (circle correct one) SAVE [✓ LOSE]	Did they save or lose time? (circle correct one) SAVE [✓ LOSE]
How many hours? 1 hours	How many hours? 2 hours

ANSWER KEY for WORKING TOGETHER

II.

<table>
<tr><th>NATION A</th><th>NATION B</th></tr>
<tr><td colspan="2">TIME SPENT BEFORE TRADING</td></tr>
<tr><td>One basket of vegetables took 8 hours to produce
One basket of fish took 9 hours to produce
TOTAL 17 hours</td><td>One basket of vegetables took 12 hours to produce
One basket of fish took 10 hours to produce
TOTAL 22 hours</td></tr>
<tr><td colspan="2">TIME SPENT AFTER SPECIALIZATION AND TRADING</td></tr>
<tr><td>Nation A produces two baskets of fish. They keep one basket of fish and trade to get one basket of vegetables.
Total hours of effort 16 hours (2 baskets x 9 hours)</td><td>Nation B produces two baskets of vegetables. They keep one basket of vegetables and trade to get one basket of fish.
Total hours of effort 20 hours (2 baskets x 12 hours)</td></tr>
<tr><td colspan="2">WOULD THIS TRADE BE BENEFICIAL?</td></tr>
<tr><td>Before trading Nation A spent 17 hours producing a basket of fish and a basket of vegetables
After specialization and trading they spent 16 hours to get a basket of fish and a basket of vegetables
Did they save or lose time? (circle correct one) [✓ SAVE] LOSE
How many hours? 1 hours</td><td>Before trading Nation B spent 22 hours producing a basket of fish and a basket of vegetables
After trading they spent 20 hours to get a basket of fish and a basket of vegetables
Did they save or lose time? (circle correct one) [✓ SAVE] LOSE
How many hours? 2 hours</td></tr>
</table>

BALANCE OF PAYMENTS

Objectives:

The student should be able:

To generate a sample balance of payments total by completing the student worksheet.

To interpret graphs relating to imports and exports.

To generalize how the balance of payments affects national economic decision making.

Materials:

Student reading: "Balance of Payments"

Procedure:

1. Tell the class that in the last lesson we considered how countries decide which products and services they will produce and which they will trade for. Today we will consider how countries keep track of trade figures through the balance of payments records.
2. Distribute the reading "Balance of Payments" and read through the material with the students, up to the chart.
3. Have students fill in the chart.
4. Go over the figures they filled in on the chart. Then ask them if the figures on the chart indicate a favorable or unfavorable balance of trade for the U.S.
5. Finish reading the rest of the article with the class.
6. Refer back to the chart and ask the following questions:
   Which of the items represent goods and which represent services?
   What could the country do to help make the figures balance better?
   What happens to a country if they do have a negative balance of trade?
7. Next ask the class if they think the trade balance of the U.S. is favorable or unfavorable at the present time. Then ask if they think the balance of trade situation is a real cause for alarm and why they think as they do.

Student Reading

BALANCE OF PAYMENTS

Balance of payments simply is the bookkeeping process used by countries to keep track of their economic transactions in money values. This is the same as a credit and debit sheet or profit and loss sheet. It is a set of figures with the value of imports on one side and the value of exports on the other.

Payments to America	Payments from America
____________	____________
____________	____________
____________	____________
____________	____________
Total	Total

If the sides are not the same, it may indicate a favorable or unfavorable balance. If we bought more than we sold this would be an unfavorable balance. If we sold more than we bought, it would be a favorable balance. The goal of most governments is to get the figures to be very close.

A balance of payments cannot be out of balance, however, because it is merely a list of figures. It only shows whether the balance (total figures) is favorable or unfavorable. It should also be understood that these figures are expressed in terms of money which is always converted to one currency for comparison. As well, these figures sometimes show only the exchange of goods, while at other times they include the trade of both goods and services.

Fill out the following sheet to determine whether there is a favorable or unfavorable balance.

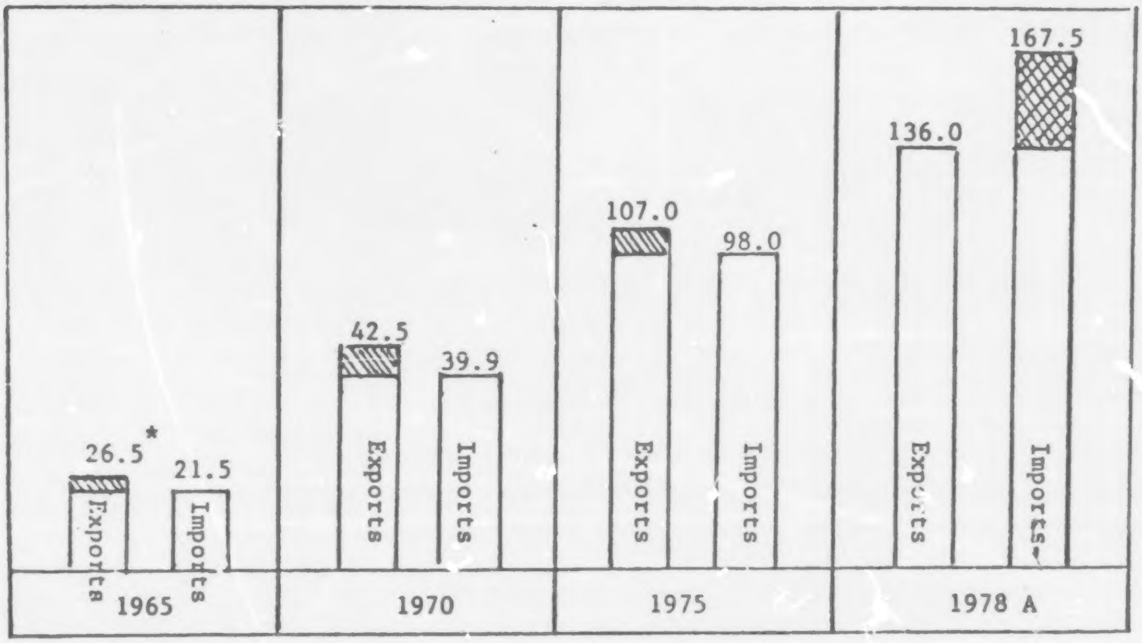
Student Worksheet
-2-

BALANCE OF PAYMENTS

	CREDITS (Receipts from Foreigners)	DEBITS (Payments to Foreigners)
1. A person buys $3,000 worth of stock in a Malaysian company,		
2. A Canadian tourist spends $1,800 on a three week vacation.		
3. An African student pays an American university $2,000 in tuition for a year of graduate study.		
4. A wealthy banker buys a Rolls-Royce for $35,000 in England.		
5. The mayor of an American city flies to Nairobi and spends $900 on an African safari.		
6. Rainier Bank pays $1,000,000 in dividends to foreign owners of its stock.		
7. A camera store buys $5,000 worth of Japanese cameras in Japan.		
8. An American business person gambles away $5,000 on an island in the Caribbean.		
9. Datsun sells $9,000,000 worth of cars.		
10. Coca Cola sells its entire operation to "7-Up of Kenya" for $5,000,000.		
11. A Swiss banking syndicate buys $1,000,000 of Weyerhaeuser Company stock.		
12. An American receives $20,000 in dividends from stock holdings in Peugeot.		
TOTALS		

This worksheet is patterned after an exercise printed in "Focusing on Global Poverty and Development" by Jayne C. Miller.

There are different reactions to unfavorable balance of trade figures. Here is a picture of the actual United States balance of trade for the last few years.



▨ = Surplus

▩ = Deficit

*Figures in billions of dollars

A - Projected. Figures are not totally finalized

Many people, including the President, are seriously alarmed by the situation. In 1979 President Carter made a couple of moves which he hoped would help solve the problem which has come about since our oil purchases and other imports have risen while our sales abroad have dropped. Carter has asked that the Export-Import Bank be more generous in giving loans to foreign countries who are buying goods from America. The Small Business Association will also make more loans to businesses that are providing exports. As well, they are attempting to reduce the number of times when sales are vetoed for environmental or foreign policy reasons. As an example, in the past we would not sell computers to Russia for the 1980 Olympics because we wanted to show displeasure with the trials of Soviet dissidents.

Another approach which can be taken is simply to cut imports either by adding tariffs so the goods cost more, or by limiting consumption and use. If Americans used less oil, our import figures would decline.

On the other side of the coin there are a number of people who are not alarmed by an unfavorable balance.* Geoffrey Wood and Douglas R. Mudd, in a recent Federal Reserve publication indicated that this is in part because we have had an historical record of trade fluctuations. More important in their view is the belief that all money which leaves the country as payment for import goods will eventually come back as either purchases of our exports or as foreign investments from abroad. They claim an unfavorable balance of trade only means that there is currency which is not buying goods but is being used for investment instead. As an example, our purchases of oil from the Middle East not only result in sales of goods to those countries to get back our dollars, but also result in Middle Easterners buying property, stocks and education in the United States. Cutting imports would only mean there was less money flowing back into our economy. They also demonstrate that a trade deficit does not cause long-term unemployment. Certain industries will be hurt but the money will return in purchases in other areas so there will be new jobs, assuming a relatively free movement of labor and resources. When we began buying large numbers of televisions from Japan, American television suppliers had to lay off people, but when other countries began buying our computer systems, these industries hired new employees. So total employment was not adversely affected.

---

*See Wood, Geoffrey, and Douglas R. Mudd, "The Recent U.S. Trade Deficit-- No Cause for Panic," Federal Reserve Bank of St. Louis, Review, April, 1978.

Another problem that clouds the issue of balance of payments is that the United States has many multinational corporations which have plants in other countries. These factories produce goods which are sold in other countries. The trade figures are not reflected in the American balance of payments chart, but we ultimately get many of these dollars in the form of retained profits. This money amounted to $20 billion in 1977 alone, according to "Trying to Right the Balance," Time, October 9, 1978.

All of this may seem confusing, but it really isn't. The important thing is to remember that a balance of payments merely is a list of import and export payments. The figures only indicate a favorable or unfavorable balance. Regardless of whether the figures are favorable or unfavorable at the moment, almost all money which leaves in the form of payments for imports will return as payment for exports or as investments within our country.

BALANCE OF PAYMENTS

	CREDITS (Receipts from Foreigners)	DEBITS (Payments to Foreigners)
1. A person buys $3,000 worth of stock in a Malaysian company,		3,000
2. A Canadian tourist spends $1,800 on a three week vacation.	1,800	
3. An African student pays an American university $2,000 in tuition for a year of graduate study.	2,000	
4. A wealthy banker buys a Rolls-Royce for $35,000 in England.		35,000
5. The mayor of an American city flies to Nairobi and spends $900 on an African safari.		900
6. Rainier Bank pays $1,000,000 in dividends to foreign owners of its stock.		1,000,000
7. A camera store buys $5,000 worth of Japanese cameras in Japan.		5,000
8. An American business person gambles away $5,000 on an island in the Caribbean.		5,000
9. Datsun sells $9,000,000 worth of cars.		9,000,000
10. Coca Cola sells its entire operation to "7-Up of Kenya" for $5,000,000.	5,000,000	
11. A Swiss banking syndicate buys $1,000,000 of Weyerhaeuser Company stock.	1,000,000	
12. An American receives $20,000 in dividends from stock holdings in Peugeot.	20,000	
TOTALS	$ 6,023,800	$ 10,048,900

This worksheet is patterned after an exercise printed in "Focusing on Global Poverty and Development" by Jayne C. Miller.

FOREIGN CURRENCY AND EXCHANGE

Objectives:

The student should be able to:

Explain what the function of money is in world trade.

Explain how money values are influenced by supply and demand factors.

Explain how an increase in the available currency may cause a decline in its world value.

Materials:

Student reading: "Foreign Currency and Exchange"
Student worksheet: "Foreign Currency and Exchange"
Copies of Egyptian Piaster Sheets (1 per student)
Fifteen American dollars (copies)
Bag of candy

Procedure:

1. Tell the class that in the last lesson we looked at balance of payments which were the import and export records for a country in terms of money. Today we will look further at money and the process by which it is exchanged and valued by two or more countries.

2. Distribute student reading: "Foreign Currency and Exchange" and read together and discuss to make sure they understand what they read.

3. Tell the class you are setting up a currency market, and you will sell 1 piece of candy for 1 American dollar. (Show them the dollar replicas.)

4. Tell the students they will simulate Egyptians, and each will receive a random amount of Egyptian piasters and pounds.

5. Distribute at random 4 piasters and pounds of various values to each student. Explain to the class that 100 piasters are in each pound.

6. Tell the students that you are selling 5 pieces of candy this round, but you will only accept the dollar replicas you showed them. They will need to trade their piasters for these dollars before they can buy the candy.

6. Appoint a banker. Announce that the banker will auction off the dollars. Give him the dollars and let him set up in the front of the room.

7. On the board put a chart similar to the one below:

Price	Round 1	Round 2	Round 3
200 piasters			
190 piasters			
180 piasters			
170 piasters			
160 piasters			
150 piasters			
140 piasters			
130 piasters			
120 piasters			
110 piasters			
100 piasters			

8. Appoint a tally keeper. Have the tally keeper stand by the chart and put a mark after each price at which the American dollars are sold.

9. Have the banker auction off the dollars. As each bid is accepted the bidder should go to the bank and exchange the Egyptian money for the dollars. The tally keeper should make a mark on the chart.

10. Continue until the banker has sold all five dollars.

11. Stop the bidding. Have the owners of the dollars bring up their money and exchange them for the candy.

12. Distribute another two pieces of Egyptian money to each student.

13. Announce the beginning of round 2. There will be another set of 5 American dollars and 5 pieces of candy.

14. Have the banker and tally keeper do their same jobs.

15. Repeat the process. Be sure the students can see the tally chart to ascertain at what rates American dollars sold during the last round.

16. After you have finished round 2, announce that productivity has increased and for round 3 you will be able to provide 2 pieces of candy for each American dollar.

17. Finish round 3.

18. Discuss the following questions:
    A. What prices were paid for American dollars?
    B. How much did the prices vary in each round?
    C. What determined the exchange rate of piasters and dollars?
    D. How does the exchange illustrate the concept of supply and demand?
    E. What happens when there is a change in production levels which would benefit foreign customers?

19. Write the following questions on the board and have the students answer them on a sheet of paper.

A. The three functions of money are to serve as:

____

____

____

B. Most foreign trade is invoice in terms of:

____________________________.

C. The value of any currency is determined by its ___________________ and ___________________.

D. When currency declines in value, we say it is

____________________________.

E. The place where money values are set and where money from foreign countries is exchanged is a

__________________________________.

Student Reading

FOREIGN CURRENCY AND EXCHANGE

The world of foreign currency often seems confusing. Piasters, lira, pence, rubles, yen and krona are terms difficult enough to comprehend on their own without adding the task of trying to figure out what each is worth in terms of United States dollars.

All of these currencies are money, so all serve the same functions. Money is a medium of exchange, a store of value and a measure of value. As a medium of exchange, money is accepted as a means for purchasing goods and services. Both the consumer and producer agree to the form of money. As a store of value, money can be saved for future use, a characteristic that many items used as barter goods did not have. Where crops could spoil or animals die, money lasts for a long period of time. As a measure of value money allows us to compare the worth of one object with the worth of another. We can say a car is worth so many dollars, while a record is worth so many dollars. Foreign currencies all serve the same three functions.

Now to the important question: How do we know how much any currency is worth? The simple answer is that money is worth whatever people are willing to pay for it. This means it is simply a case of supply and demand. If there is little demand for a country's currency and it is in large supply, the money will be worth less than if there is a high demand for it or a small supply of it.

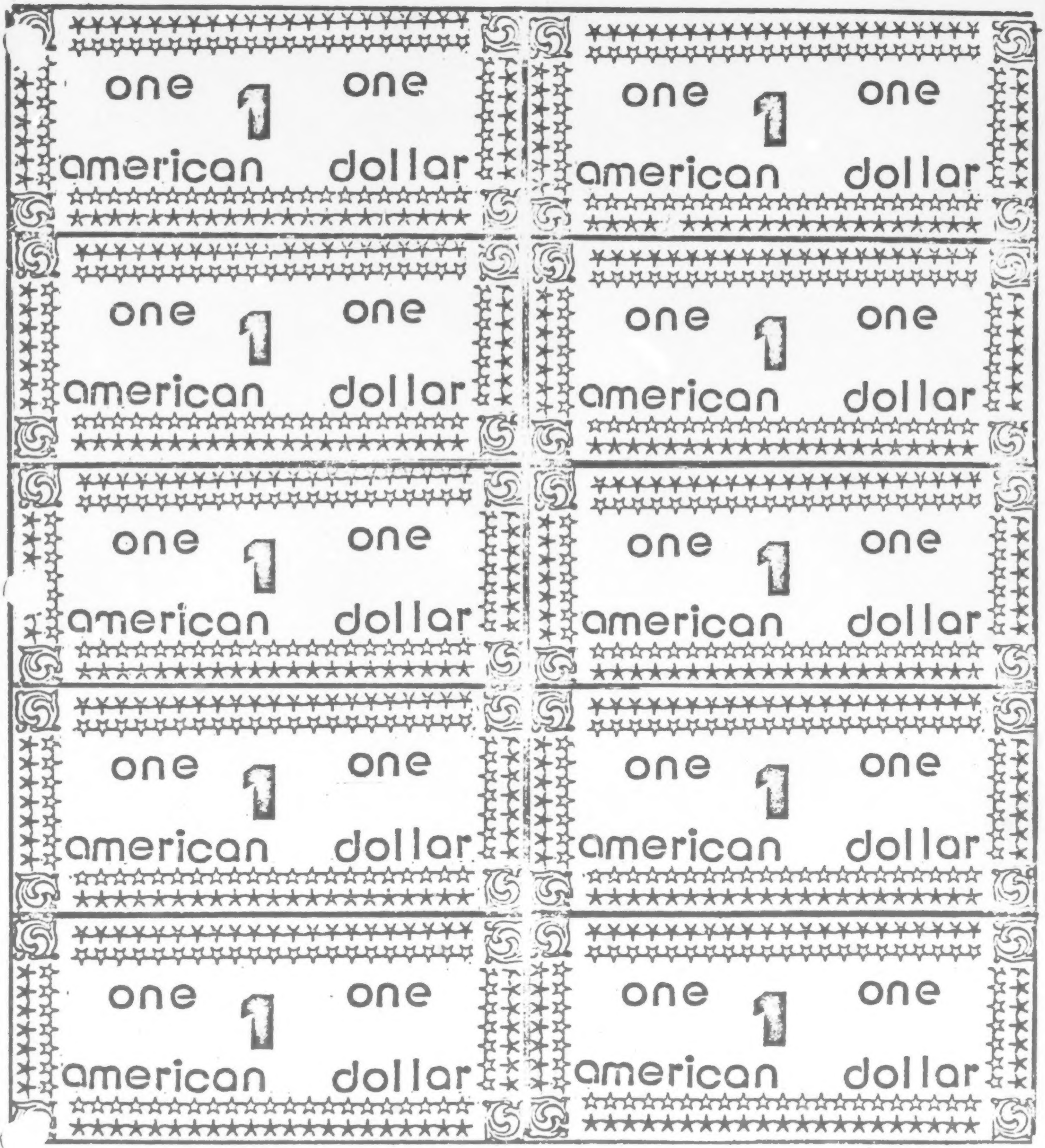
As an example, if the United States buys more imports, there is a greater supply of U.S. dollars outside the country. As the supply increases, the money is worth less. Thus we say the money is devalued. If countries want the currency of another country, its money will be more highly valued.

Currency values and exchanges are usually made at currency markets. These are places where countries and banks can find out relative values of different currencies. Each day the values change, and often the changes will be made within a day. In the past, currency values were set at a rate and maintained for a period of time. Now supply and demand allows constant alterations.

The situation of foreign exchange is eased somewhat because many financial deals are calculated in United States dollars. An African country buying oil from Kuwait might well calculate the sale in terms of United States dollars. At present, approximately 70% of all international trade is invoiced in United States dollars. A hundred years ago when the British Pound was the most important currency in the world, almost all transactions were recorded in British Pounds. Business people have found this to be easier for them.

Let's look at how a currency market functions.

You will need 25 American Dollars


one 1 one american dollar
one 1 one american dollar
one 1 one american dollar
one 1 one american dollar
one 1 one american dollar
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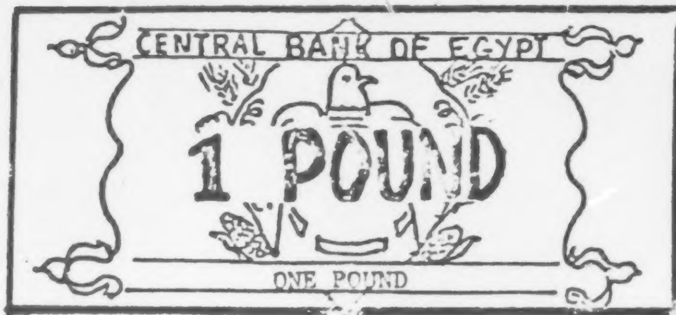
one 1 one american dollar

MONEY SHEETS (approximately one per student)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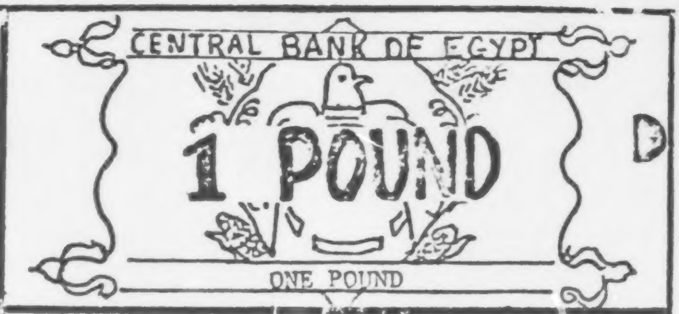
1 POUND
ONE POUND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1 POUND
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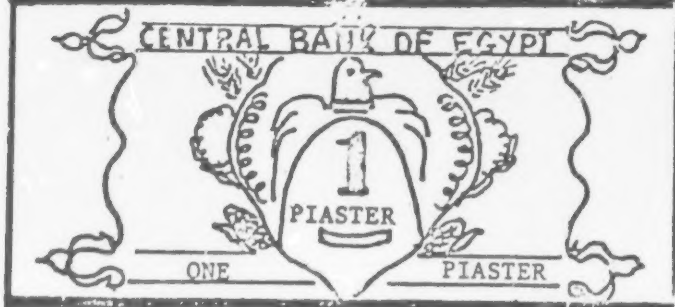
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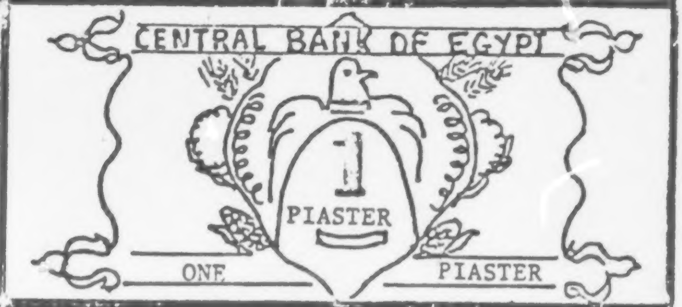
1
PIASTER
ONE
PIASTER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PIASTER
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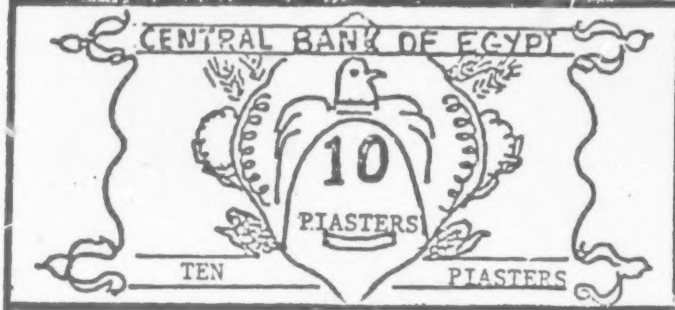
PIASTER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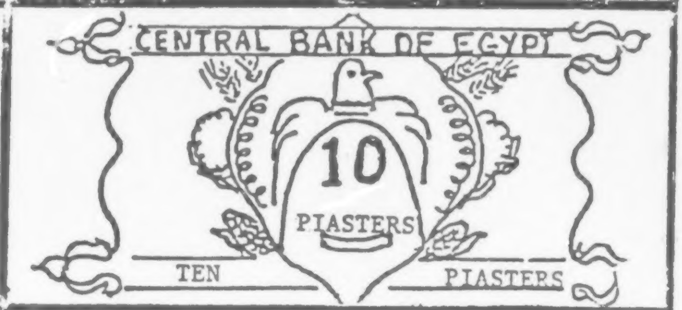
10
PIASTERS
TEN
PIASTERS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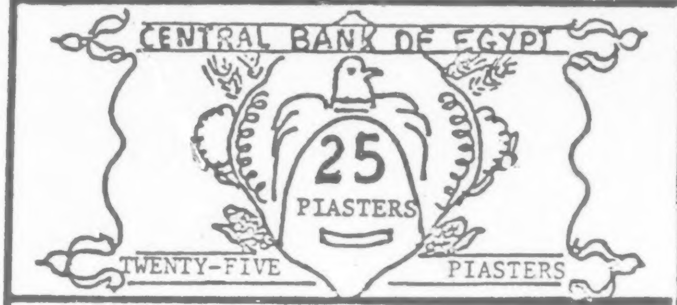
PIASTERS
TEN
PIASTERS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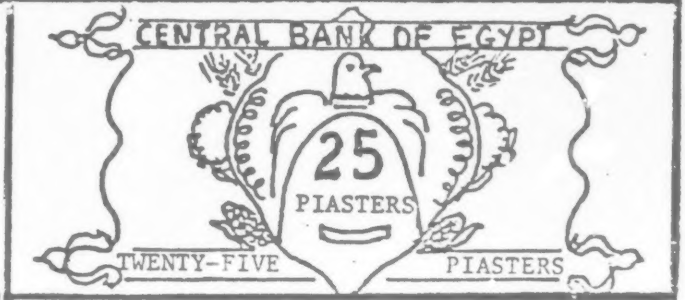
25
PIASTERS
TWENTY-FIVE
PIASTERS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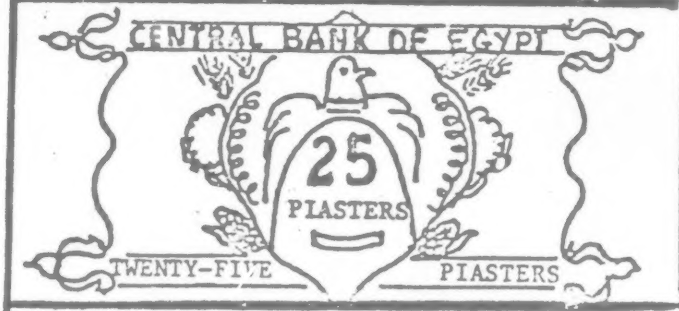
PIASTERS
TWENTY-FIVE
PIASTERS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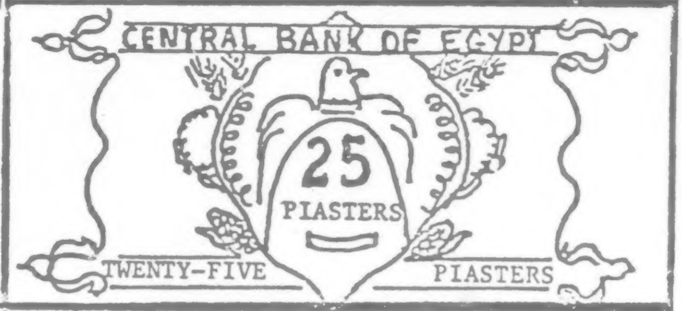
PIASTERS
TWENTY-FIVE
PIASTERS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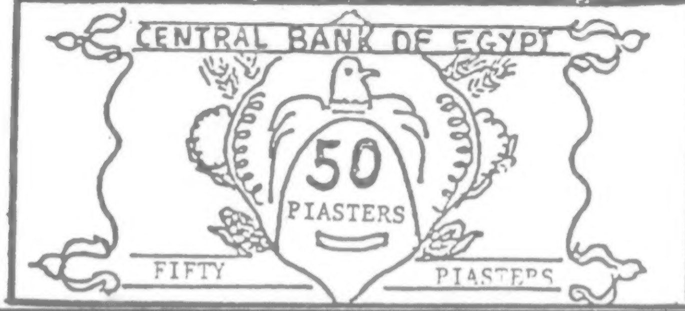
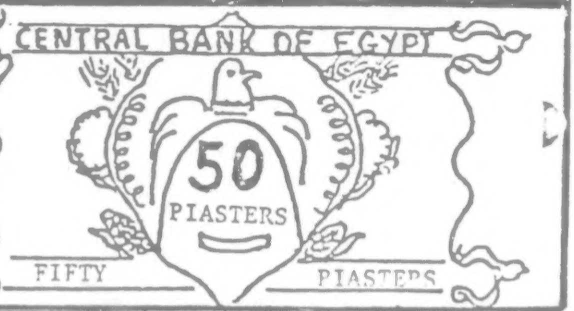
PIASTERS
TWENTY-FIVE
PIASTERS


CENTRAL BANK OF EGYPT
50
PIASTERS
FIFTY
PIASTERS


CENTRAL BANK OF EGYPT
50
PIASTERS
FIFTY
PIASTERS

THE FOREIGN EXCHANGE MARKET

Objectives:

The student should be able to:

Chart the exchange rates of a foreign currency.

List reasons why exchange rates vary.

Materials:

Copies of 10 different charts of the foreign exchange rates from the Wall Street Journal

1 sheet of construction paper for each student

Procedure:

1. Tell students in the last lesson we talked about currency markets. Ask the students who they think uses the New York foreign exchange market. (Basic users-U.S. importers, exporters, tourists, international investors, speculators, and sometimes the U.S. government. With the exception of tourists, basic users are business firms.)

2. Tell students in the last lesson we saw how the value of the money changed in the simulation and now we are going to look at some real foreign exchange rates.

3. Distribute copies of 10 different charts of the foreign exchange rates from the Wall Street Journal. Have each student chart a different country's exchange rate for those 10 days. Display the charts.

4. After everyone has had an opportunity to look at the charts, ask the class why they think the rates vary. During the discussion if the class does not come up with some of the reasons listed below, the teacher should introduce these ideas.
   Long-run factors:
   a. Domestic inflation rates (even more significant would be a nation's domestic inflation rate relative to those of major trade partners).
   b. Technology (New products and processes can generate demand in countries whose technology is not yet as advanced).
   c. Political and economic instability.
   Short-run factors:
   a. Major domestic strikes.
   b. Peculiar weather patterns affecting crops.
   c. Seasonal demand for imports.

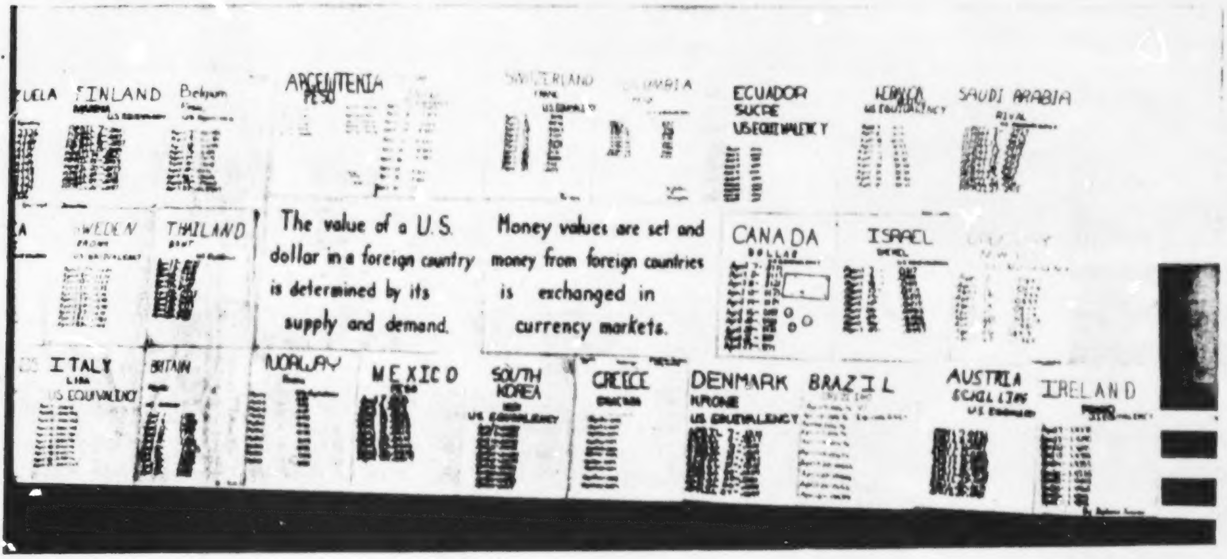
BEST COPY AVAILABLE

5. Again have the students look at the charts of the foreign exchange rates. Ask the students the following questions:

   a. Why is a franc worth 16 cents and a British pound $1.78 ? Shouldn't any nation's monetary unit be worth the same as any other nation's monetary unit?

   b. What would you rather own, a pound or a yen? A pound is worth $1.78 , a yen is worth only $.004 . Does this mean that the yen is a "cheap" money and the pound is expensive?

6. Then direct the discussion toward the purchasing power value of money. (In theory, a pound will command $1.78 worth of purchasing power in London, while a yen will command only $.004 of purchasing power in Tokyo). Point out to the students that numbers taken out of context distort reality. The pound appears to be "expensive" and the yen "cheap" but not when matched up against prices and costs in England and Japan. Britain and Japan use different numbering systems to equate value. A production worker in Liverpool may receive a weekly wage of 67 pounds. The same job commands 44,500 yen in Kyoto. Both salaries represent $135 in purchasing power of one kind of money to monies of different countries.


FINLAND
Belgium
ARGENTENIA
PESO
SWITZERLAND
ECUADOR
SUCRE
US EQUIVALENCY
SAUDI ARABIA
RIYAL
SWEDEN
THAILAND
The value of a U.S. dollar in a foreign country is determined by its supply and demand.
Money values are set and money from foreign countries is exchanged in currency markets.
CANADA
DOLLAR
ISRAEL
ITALY
LIRA
US EQUIVALENCY
BRITAIN
NORWAY
MEXICO
SOUTH KOREA
US EQUIVALENCY
GREECE
DENMARK
KRONE
US EQUIVALENCY
BRAZIL
AUSTRIA
SCHILLING
IRELAND

Charting different countries' exchange rates

MONEY FLUCTUATION

Objectives:

The student should be able to:

Convert dollar values to foreign currencies and vice versa.

State the reason for 3-month forward purchase transactions and 3-month forward sales transactions.

State how a change in the value of the dollar affects our imports and exports.

Materials:

"Touring the Multi-currency World" worksheet

"Cover Yourself" worksheet

"Money Fluctuation" worksheet

Procedure:

1. Tell students in the last lesson we talked about how the exchange rate varies from time to time. Someday they might travel outside the U.S. either on business, for personal pleasure, or due to military assignment. Therefore, it is important for them to know how to convert dollars to foreign currencies and vice versa.

2. Distribute the worksheet "Touring the Multi-currency World". Have the class try to do #1-4 by themselves and then go over them. If students find it hard to make the proper conversions, you might help them set up the problem in simple algebraic terms. For example, in question 1, students should set up an algebraic equation comparing francs to dollars:

$$\frac{x \text{ dollars}}{500 \text{ francs}} = \frac{.20 \text{ dollar}}{1 \text{ franc}}$$

$$x = \frac{.20}{1} \times 500$$

$$x = 100 \text{ dollars}$$

Then have the students try to do questions 5 & 6 by themselves and then go over them. In question 5, students can set up the same type of equation as above comparing francs to pounds:

$$\frac{x \text{ pounds}}{1{,}000 \text{ francs}} = \frac{.5 \text{ pounds}}{5 \text{ francs}}$$

$$x = \frac{.5}{5} \times 1{,}000$$

$$x = 100 \text{ pounds}$$

So long as one ration between two currencies is known $\left(\frac{.5 \text{ pounds}}{5 \text{ francs}}\right)$ any other ratio between those same two currencies can be easily found as shown above.

3. Tell students that because exchange rates vary, people involved in international trade have to be careful when buying and selling goods. Tell them one way importers try to protect themselves is the 3-month forward purchase transaction. Work through a 3-month forward purchase transaction with the class.
   a. An importer buys foreign exchange at a price determined today.
   b. The importer doesn't have to pay until the foreign exchange is delivered in three months.
   c. In three months, the bank delivers the foreign exchange at the rate agreed on, regardless of the current exchange rate.
   d. The importer was protected against an increase in the rate

4. Tell class one way exporters try to protect themselves is the 3-month forward sales transaction. Work through a 3-month forward sales transaction with the class.
   a. An exporter sells foreign exchange at a price determined today.
   b. The exporter doesn't have to deliver the foreign exchange to the bank for three months.
   c. In three months, the exporter receives payment from trade and delivers the foreign exchange to the bank, receiving domestic money in return at the price agreed on.
   d. The exporter was protected against a decrease in the rate.

5. Distribute the worksheet "Cover Yourself". Have the students try to answer the questions by themselves first and then go over them together. To answer questions 1 & 2, students need only determine whether they (as merchants involved in international trade) need to buy or sell foreign currency in order to complete the business transactions in question. To answer question 3, students need to determine the following:
   a. Will I have to buy or sell pounds for my transaction? (buy
   b. Using which exchange rate - 1 pound= $1.80 or 1 pound = $1.75 - would I rather buy my pounds? (1 pound = $1.75)
   c. Therefore, should I pay now or pay later? (later)

6. Tell the class the change in the value of the dollar affects our imports and exports. Show them the following example:

   A Japanese farmer wishes to buy 1,000 bushels of soybeans at $.66 per bushel in November. The exchange rate is Y230=$1.00. By March the exchange rate has changed to Y260=$1.00. Assuming soybean prices have not changed, how much will it cost the Japanese farmer to buy the soybeans?

   The Japanese farmer is buying 1,000 bushels at $.66 per bushel.

   1,000 bushels
   x .66 per bushel
   $660.00

   How many Yen will it cost the Japanese farmer to purchase $660 U.S. dollars?

November	March
$660	$660
x Y230	x Y260
Y151,800	Y171,600

In November, the farmer will have to pay his bank 151,800 Yen in order to purchase $660 U.S. dollars.
In March, the farmer will have to pay his bank 171,600 Yen in order to purchase $660 U.S. dollars.

Ask the class what effect an increasing dollar will make on selling goods overseas. (An increasing dollar will make U.S. goods more difficult to sell overseas.)
Ask the class what effect a decreasing dollar will have? (A decreasing dollar will encourage imports and tourism.)

7. Distribute the worksheet "Money Fluctuation". Divide the class into six groups, each group computing the costs for one item. Have the groups share their results with the rest of the class who copies down their results. Then ask the class what effect has devaluation had on the prices of our imports? on our exports?

ACTIVITY MASTER 3

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touring the multi-currency world

country	FOREIGN EXCHANGE SPOT RATE (in dollars)	(in units of foreign exchange)
France	1 franc = .20	$1 = 5 francs
Germany	1 mark = .40	$1 = 2½ marks
Spain	1 peseta = .01	$1 = 100 pesetas
England	1 pound = $2.00	$1 = ½ pound

You just returned from a four nation European tour and are tallying your expenses. How much did the following activities cost in dollars?

	FOREIGN EXCHANGE VALUE	DOLLAR VALUE
1. Three meals at exclusive Parisian restaurants	500 francs	# 100
2. Renting a Mercedes in Germany and motoring through the Rhineland	900 marks	# 360
3. Purchase of a leather coat and jacket in Spain	6,000 pesetas	# 60
4. Rail tour of England, Wales and Scotland	45 pounds	# 90
	Total	# 610

5. After Paris, you toured London. On Threadneedle Street you realized you still had 1,000 francs in your wallet so you exchanged them for pounds at a local bank. How many pounds did you receive? 100 pounds

6. To express your appreciation to the Spanish tailor who crafted your leather coat and jacket, you gave him a 100 peseta note tip. After leaving the store, you realized what you actually gave him was a 100 mark note. How much of a tip did that represent in pesetas? 4,000 pesetas

and in dollars? #40

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cover yourself

Exchange rate changes can make international trade a risky business for both importers and exporters. In each example in this activity, you see a foreign exchange spot rate (the price at which the foreign money is selling today) and the price banks, brokers and dealers think the spot rate will be three months from today. If market participants are correct in their three-month expectations, importers and exporters who haven't "covered" their trade transactions in the future or "forward" market could find costs higher and profits lower, or even suffer losses. See if you can cover yourself in the market by indicating for each example whether you would buy or sell foreign exchange forward.

1. Spot rate **(today's exchange rate)** **1 franc = $.20**	**Market expectations of the** **exchange rate in 3 months** **1 franc = $.25**

You have purchased French wine for your restaurant chain for 5,000 francs. At the spot rate, that means a $1,000 expenditure. However, as is true for most international trade, you don't pay for the wine until delivery, which will be in three months. If the price of francs rises from $.20 to $.25 between the time you agree on the purchase and the time payment must be made, 5,000 francs will cost you $1,250. Protect yourself against this exchange rate cost increase by checking the appropriate box:

Buy francs forward ☒ **Sell francs forward** ☐

---

2. Spot rate **1 mark = $.40**	**Market expectations of the** **exchange rate in 3 months** **1 mark = $.35**

You have sold a computer to a German business firm. To earn the $100,000 cost of producing the computer and your profit, you had to charge the German company 250,000 marks, since the mark spot rate is $.40. Payment, however, will not be sent until the computer is received in Frankfurt, three months from today. If marks fall to $.35 by the time you receive payment, your 250,000 marks will be worth only $87,500. Protect yourself against this exchange rate loss by checking the appropriate box:

Buy marks forward ☐ **Sell marks forward** ☒

---

3. Spot rate **1 pound = $1.80**	**Market expectations of the** **exchange rate in 3 months** **1 pound = $1.75**

You have purchased, direct from London, an album of "Beatles" oldies for 3 pounds. You have the option of paying now or waiting until the record is received in three months. Because this transaction is so small, obtaining forward exchange protection is not worth the cost. Still, you can "cover yourself" by "leading" or "lagging" in your payment. What should you do, pay now or wait? Check the appropriate box:

Pay now ☐ **Wait; pay three months from now** ☒

MONEY FLUCTUATION

What effect has devaluation had on the prices of our imports and exports?

ITEM	IMPORTING COUNTRY	EXPORTING COUNTRY	PRICE	6/1/77	6/1/78	6/1/79	6/1/80	6/1/81	5/1/82
1 pound soybeans	Japan	U.S.A.	$.28 per pound	________ Y277=$1	________ Y221=$1	________ Y221=$1	________ Y223=$1	________ Y223=$1	________ Y236=$1
1 bushel wheat	Germany	U.S.A.	$3.50 per bushel	________ DM2.36=$1	________ DM2.09=$1	________ DM1.91=$1	________ DM1.78=$1	________ DM2.36=$1	________ DM2.36=$1
1 pair Levis	France	U.S.A.	$16 per pair	________ F4.95=$1	________ F4.59=$1	________ F4.43=$1	________ F4.12=$1	________ F5.59=$1	________ F6.17=$1
1 car	U.S.A.	Japan	Y900,000	________ $1=Y277	________ $1=Y221	________ $1= Y221	________ $1=Y223	________ $1=Y223	________ $1=Y236
1 ton steel	U.S.A.	Germany	DM20,000	________ $1=DM2.36	________ $1=DM2.09	________ $1=DM1.91	________ $1=DM1.78	________ $1=DM2.36	________ $1=DM2.36
Porcelain	U.S.A.	Holland	G100	________ $1=G2.46	________ $1=G2.24	________ $1=G2.1	________ $1=G1.95	________ $1=G2.62	________ $1= G2.63

ATTITUDE SURVEY TOWARD INTERNATIONAL TRADE

Objectives:

The student should be able to:

Assess community attitudes toward international trade.

Identify any economic misconception that citizens may have, such as not understanding interdependence.

Compare and contrast student attitudes with surveyed adult attitudes on foreign trade.

Materials:

Student survey form.
Adult survey forms.

Procedure:

1. Tell the class that recently we have been looking at foreign currency and exchange rates and talking about foreign trade. Now we are going to find out how different people feel about international trade.

2. Distribute the Student Assignment Sheet for Community Survey. Ask the class to complete the survey and bring their answers to class tomorrow.

3. Distribute the Survey Response Forms for Adults. Ask the students to interview 2 adults and bring their responses in tomorrow.

Next day.

4. Write out the eight questions in brief form on the board and label two response columns: one "student" and the other "adult".

5. Tally the responses by asking each question, first student response and then adult response.

6. Debrief, by asking the following questions:
   a. Is there a significant difference in responses between the two categories?
   b. Are the responses generally favorable or unfavorable toward foreign trade?
   c. Is there a consistent pattern to the responses?
   d. What did you learn from administering the survey and tabulating the results?
   e. Do you think the results accurately reflect attitudes of our total community? total state?

STUDENT ASSIGNMENT SHEET FOR COMMUNITY SURVEY

Community attitudes toward international trade present an interesting field for study. You will be asked to fill out a survey form yourself in class and then to interview two adult members of your community.

The results will be tabulated in class and you will be given an opportunity to evaluate the data.

Tell the people you interview that this is a class project, and that their names will not be used. Their answers are to be given anonymously.

Bring your own responses to class tomorrow.

SURVEY RESPONSE FORM - STUDENT

Please respond to the following questions by checking yes, no or undecided.

	YES	NO	UNDECIDED
1. Foreign products are usually more expensive than American products.			
2. We export too many of our vital resources.			
3. We should protect American jobs by putting limits on foreign imports.			
4. America takes advantage of underdeveloped countries in trade.			
5. America benefits from foreign trade.			
6. Delaware benefits greatly from foreign trade.			
7. America would be better off if she were more self-sufficient.			
8. Underdeveloped countries take advantage of America in trade.			

SURVEY RESPONSE FORMS FOR ADULTS

Introduction: Hello! I am _____(name)__, a student at ___(school)___. We are studying a unit on the American Economic System. We have an international trade survey, and I would like to ask for your help. All of your answers will be kept completely anonymous. Would you be willing to help us?

Please respond to the following questions by checking yes, no or undecided.

ADULT # 1	YES	NO	UNDECIDED
1. Foreign products are usually more expensive than American products.			
2. We export too many of our vital resources.			
3. We should protect American jobs by putting limits on foreign imports.			
4. America takes advantage of underdeveloped countries in trade.			
5. America benefits from foreign trade.			
6. Deleware benefits greatly from foreign trade.			
7. America would be better off if she were more self-sufficient.			
8. Underdeveloped countries take advantage of America in trade.			

ADULT # 2	YES	NO	UNDECIDED
1. Foreign products are usually more expensive than American products.			
2. We export too many of our vital resources.			
3. We should protect American jobs by putting limits on foreign imports.			
4. America takes advantage of underdeveloped countries in trade.			
5. America benefits from foreign trade.			
6. Delaware benefits greatly from foreign trade.			
7. America would be better off if she were more self-sufficient.			
8. Underdeveloped countries take advantage of America in trade.			

TRADE RESTRAINTS

Objectives:

The students should be able to:

Define: subsidy, embargo, tariff, quota.

Explain how trade restraints affect the flow of international trade.

Materials:

Reading: Trade Restraints
Worksheet: Trade Restraints

Procedure:

1. Tell the students that in the last lesson we looked at public opinions on foreign trade. Trade barriers are often created because of public opinions. Ask if someone can explain what a barrier is. Then relate the definition to a trade barrier.
2. Tell the class today we are going to look at the effects of trade barriers which are also called trade restraints on the flow of trade.
3. Distribute the worksheet "Trade Restraints". Read and discuss a section at a time. Provide suitable local or current examples.
4. Have students complete worksheet.
5. Ask students to bring articles they find in the paper about trade restraints.

TRADE RESTRAINTS

Trade restraints and barriers are recorded from the times of earliest history. Today they continue to exist in a variety of forms, but they are a constant source of disagreement. There are many groups who support them but many others who oppose them.

In earlier lessons we discovered that the countries of the world are interdependent. Resources are divided unequally. The theory of comparative advantage allows countries to specialize in the things they can produce most economically and to trade to get the things they could produce least economically. The extension of these concepts would be a free trade area where goods and services could flow freely between countries. The European Common Market is an example of a free trade area. Over a period of years, the member countries have dropped their trade barriers to other members so that products can move more freely. Most of the areas of the world have not followed suit. They continue to erect barriers to trade.

TARIFFS

The most common form of trade barrier is the tariff or duty. In the past countries would use revenue tariffs to get money to run their governments. To do this they would merely add a certain amount of money as a tax when imported goods came into the country. Revenue tariffs are rarely used now.

Protective tariffs are designed to add a tax to imported goods to make them less competitive with domestic products. They give the manufacturers and workers of one country an advantage in price because competitive goods from foreign countries will cost more.

As an example, if a transistor radio costs $60 to produce and distribute in the United States, it might be outsold by a Japanese radio which could be imported and sold for $35. If the manufacturers and retailers of American radios can convince our national legislature, a protective tariff of say $60 on Japanese radios would then cost more than American radios.

The price tag that a consumer sees in a store does not indicate the extra amount that is being paid as a tariff. An increasingly large number of foreign goods are subject to tariffs.

SUBSIDIES

Another approach to the same problem is the government subsidy to special industries. This government assistance allows them to lower prices so they can compete with foreign factories. This system, however, penalizes the whole country. The only people who are hurt by protective tariffs are the people who consume the merchandise. If a protective tariff is placed on cameras, only those who buy cameras pay for the protection. If the government provides a subsidy for peanut growers paid for by tax money, everyone in the country who pays taxes has to pay for the protection whether they buy the product or not.

QUOTA SYSTEM

Another practice which achieves the same result is the quota system. The government allows only limited numbers of a product to be imported. This means that even though the import sold at a lower price, there are not enough of them to meet the demand so American products would still have a market at a higher price.

These restrictions can often limit competition and force a dependence on American products, but not always. If the quality of foreign products is significantly high, people will pay the higher prices. There is a considerable market for imported cars and cameras because of their high quality.

EMBARGOES

At times a country may totally end trade with another country. At these times an embargo has been placed on trade. This embargo might be limited to just one product, but frequently trade with the entire country is cut off. This is generally done for political reasons. When the United States objects to the political philosophy of a country, they may refuse all trade.

These restrictions can change as is shown by the new trade policies with China (Mainland) after we had refused trade through the period of 1948 to 1972.

Why do countries continue to use trade barriers? They still place restraints on trade because they think it is in their best interests. The major argument is that industries and jobs need to be protected from foreign competition. Currently there is a move in the direction of more trade barriers.

Labor unions and legislators proclaim that buying goods and services from foreign countries endangers our own companies and workers. If we buy foreign cars we put people out of work who would have made American cars to sell to those customers. Some of our plants would eventually have to close.

Many economists argue that this is not necessarily true. All trade is a two-way contract. When we buy goods from abroad, those countries in return also buy goods from our country.

Job losses in some industries are highly visible but free international trade should not reduce over-all employment. While some industries will be hurt when foreign goods are purchased, other industries will be making products to be sold back to those same countries. There will be a counterbalancing increase in jobs in another industry. Protective tariffs can protect against serious disruptions in our job patterns, but they should not prohibit changes.

The other side of the coin is that a greater specialization and a more efficient use of resources ultimately results when free trade is allowed to function.

Name ______________________

Date ______________________

TRADE RESTRAINTS

1. Why have trade barriers developed?

2. What is a tariff?

3. How are revenue tariffs different from protective tariffs?

4. How does a subsidy achieve the same results as a tariff?

5. What are the reasons why a country might place trade restrictions on imported goods?

6. If Mercedes Benz were given an import quota of only 2000 cars a year to the U.S., what effect would this have on the sale of Mercedes Benz? What effect would it have on the sale of American luxury cars?

7. If the American camera industry were haveing problems competing with Japanese camersa, what steps could the government of the U.S. take and which step would be the wisest?

8. What is an embargo?

TRADE-OFFS OF TRADE

Objectives:

The students will be able to:

Explain how scarcity affects economic decision making.

Identify alternate economic policies relating to foreign trade and choose among these alternative policies.

Understand that every choice incurs opportunity costs.

Materials:

Reading and worksheets: Trade-Offs of Trade

Procedure:

1. Ask the class if they remember from the film series we've been seeing what a trade-off is. Have someone give the definition. Tell the class today you're going to discuss the trade-offs of trade.
2. Distribute the worksheets and reading: Trade-offs of Trade.
3. Go over the first page together and discuss. Make sure the students realize there are costs and benefits for each choice and they must be aware that each choice incurs opportunity costs.
4. Either individually or in pairs have the students fill in the second sheet. Discuss everyone's views.
5. Either individually or in pairs have the students fill in the third sheet. Discuss everyone's views.
6. Read together the fourth sheet and discuss any questions the students might have.

TRADE-OFFS OF TRADE

Every economic decision involves trade-offs. There are costs and benefits for every choice that is made. The process is made more difficult because there is seldom agreement on any position.

As an example, let's look at a very real situation. Japan can produce steel more cheaply and more efficiently than can the United States. This is due in part to the very modern steel plants that were built in Japan after the Second World War. By comparison, many of the American steel plants are old and somewhat out-dated. The United States could begin buying most of their steel from Japan or they could continue to produce steel themselves

CHOICE: Buy Japanese Steel		CHOICE: Make Steel in America	
Costs	Benefits	Costs	Benefits
American workers temporarily out or work.	Cheaper steel	More expensive steel.	Workers continue in their jobs.
We wouldn't have our own steel plants in time of war.	Possibility of producing other things with resources.	Forego the possibility of having workers do other things.	We would have our own steel plants in time of war.
Steel plants are a sign of an "industrialized" nation, and we wouldn't have as many.	We would be able to use resources more efficiently, allowing the theory of comparative advantage to work.	Less efficient use of resources.	Steel plants give us prestige as an "industrialized" nation.
Volume of imports might increase greatly.	Products made of steel will cost less.	Products made of steel will cost more.	We would not have to buy imported steel so our import volume would not increase greatly.

What decision would you make?__________________________________

Why?

You realize that the opportunity costs of one decision are all of the things you have to give up by not choosing the other alternative.

Let's look at another situation.

Over the years the Japanese have developed a highly skilled industrial complex that can produce excellent television sets at a moderate price. People in the United States are buying more imported television sets and fewer sets made in the United States.

Fill out the following chart:

CHOICE: Add protective tariffs to the price of Japanese television sets		CHOICE: Allow free price competition	
Costs	Benefits	Costs	Benefits

What decision would you make? ______________________________

Why?

In a slightly different kind of situation, the United States often makes trade decisions on the basis of politics. We decided not to sell computers to Russia for the 1980 Olympic games because of the trials of Soviet dissidents during the summer of 1978. The act was seen as a way to punish the Russians for their disregard for human rights. Fill out the following chart:

CHOICE: Sell computers to Russia	
Costs	Benefits

CHOICE: Refuse to sell computers to Russia	
Costs	Benefits

What decision would you make?________________________________

Why?

The essential questions usually involve competition. The reality is that we frequently have economic goals which are not compatible. We want to preserve jobs but we want the lowest prices. We want to have our own factories but we want to get our goods and services in the most efficient way. We may not want to sell to a country to punish them for political reasons but we also want to export as many of our products as possible.

We used the examples of Japanese steel and televisions and selling computers to the Russians. There are many other situations which face the country presently. We must decide whether to buy foreign beef at prices cheaper than our farmers can raise and sell it. The problem of tariffs on Italian and Spanish shoes is always very real. Countries that specialize to make use of the theory of comparative advantage can often find themselves in difficulty if the demand for a product decreases or if something goes wrong with their resources. We've seen what can happen to the coffee and banana raising countries if they have bad weather.

Economic decisions are most wisely made after considering the costs and benefits of each choice. We may decide not to buy Japanese steel even though it is less expensive because we want to protect our factories and workers. If this is the alternative that is agreed upon, then we have made a decision to tolerate the higher costs of steel and products made from steel. Thus economic decisions are merely a continuous series of trade-offs because we cannot have everything we want.

ADDITIONAL ACTIVITIES

In addition to the lessons described on the previous pages, there were other activities correlated with this study.

Letters of Inquiry

In order to obtain information the students wrote letters of inquiry. They wrote to:

*HUAL, the auto liner company, to ask why they chose Wilmington as a port and why people should ship with their company rather than another one

*the port director to find out what advantages the Port of Wilmington has over other ports

*the ship's captain to ask about the ship and the crew

*the people at the port to ask them about their jobs

*the stevedore company to ask about longshoremen.

Thank you Letters

They wrote thank you letters to the following people:

*Mr. Govertsen for speaking and showing us around the ship

*Mr. Doherty, the assistant port director, for speaking and showing us lsides about the port

*the captain of the Karinita for allowing us to come on the ship and for the refreshments

*Mr. Vitele, for coming and talking to the class about longshormen

*Mr. Sommers for teaching us about debating and judging the debate

*Mr. Murphy from Bulkfleet for arranging for the class to go out on a tug and tour the Port of Philadelphia

*the captain of the tug for taking us around the port and allowing the students to steer the tug

*the cook of the tug for cooking and serving us lunch

*parents who chaperoned us on trips.

Interviews

The students learned the proper techniques of interviewing when they had to interview two adults about foreign trade.

Crossword Puzzles

The students made up two crossword puzzles using the vocabulary from the international trade unit. (Sample in appendix.)

Essays

After the guest speakers, the trips (the Karinita, the Port of Wilmington, the Port of Philadelphia, and the Maritime Museum), and the films, the students wrote essays summarizing and reacting to the people and the places. (Samples in appendix.)

Slide Presentation

After we toured the Port of Wilmington, the students wrote, illustrated, and recorded a slide presentation about the port. Many varied skills were used to put this presentation together. (Copy enclosed)

Original Game

As a culminating activity of the international trade unit, the students were assigned the task of creating games which would somehow use the information they had learned from the study of foreign trade. They had to write the directions for their games so that players would be able to play the games without asking any questions of the persons who designed the games. Students evaluated each other's games on whether they were attractive, did they teach economics, and were the directions self explanatory. This activity provided an excellent opportunity for the students to learn to read and write directions, as well as review their knowledge of foreign trade. (Pictures in appendix.)

Debate

After we had a very heated discussion of trade restraints, one of the students wanted to know whether we could debate the issue. Not ever having had any training in debating, I called Mr. Dean Sommers, chairman of the Committee in Support of Delaware Forensics. He came to school and taught the students some of the basics of debating. He suggested when we had our debate, we should use a modified form of the Oxford form of debate:

Affirmative 1 - 4 min.
Negative 1 - 4 min.
Affirmative 2 - 4 min.
Negative 2 - 4 min.
2 minute break between each speaker

Rebuttal
Affirmative 1 - 2 min.
Negative 1 - 2 min.
Affirmative 2 - 2 min.
Negative 2 - 2 min.
1 minute break between each speaker

Our resolution was: "Resolved, trade barriers should be put on goods coming into the U.S." The class divided into two groups, the affirmative and the negative, depending on their personal feelings. The next week was spent on gathering information to support whatever view the students held. Then each side chose two people to represent them in the debate.

The day of the debate Mr. Sommers came back and judged. He had the students who were not debating take notes like they were judging, too. At the conclusion of the debate he went over his notes in detail with the class and told them exactly how and why he scored the debaters as he did, asking the class to compare what they wrote with what he wrote. (Mr. Sommers' score sheet is in the appendix.) It was an excellent experience for all who were involved.

Reports

The students were assigned the task of doing research on the country of Norway, since we had adopted a Norwegian ship. They then had to write a report about the country and people of Norway based on the information they had gathered. Because they were going to meet some Norwegians, they tackled the job enthusiastically.

Posters

Many of the students chose to share the information they had gathered about the Karinita in the form of a poster. For the group to design and execute a suitable poster was an interesting task for many of them. Deciding what to write and how to write it gave the students an opportunity to practice the decision making skills they had learned in "Trade Offs".

Mapping Skills

One group of students made a map of the world and kept track of the Karinita's trips. They became familiar with places they had never heard of before. They especially became familiar with the countries of the Middle East.

Greeting Cards

On holidays the students would make greeting cards and send them to the crew and captain of the Karinita.

Evaluation

As part of the formal evaluation of my students' economic knowledge, I gave the Test of Elementary Economics published by the Joint Council On Economic Education. The pre-test was given in September and the post-test in May. On the pre-test the mean was 8.97, the median 9, and the mode 9. On the post-test the mean was 37.89, the median 38, and the mode 38. The average gain was 28.92 for an average percentage gain of 322.41%.[1]

However, it would be unfair to say that all the knowledge that was gained resulted totally from the study of the ship, the port, and trade units, since all of the students were also involved in a Mini-Society (Tiny Town), and as part of teaching the Mini-Society, every other Friday, I taught economic principles as they related directly to our society. Also, they all saw the "Trade-Off" series and took part in discussions of these films. Thus, some concepts such as: scarcity, competition, specialization, goods and services, money, and supply and demand were discussed many times in various ways. Undoubtedly, the ship, port, and trade units reinforced what the students were learning in Tiny Town and vice versa. Consequently, it is difficult to determine exactly how they gained their knowledge, but the important thing is they did learn economics this year!

In addition to the Test of Elementary Economics, I constructed some other tests to measure specific knowledge relating to ports and trade. Examples of these are in the appendix. Post-tests on both the port and trade units showed significant gains.

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[1] Results were analyzed by the Center for Economic Education at the University of Delaware.

Also, other activities in which the students were involved helped me to evaluate their learning. For example, their notebooks, the writing and producing of the slide presentation, the posters on which they imparted information, the debate, and the games they created were all indicators of what the students were learning. They not only showed the students understood basic economic concepts, but also they had developed critical thinking skills and knew how to categorize, and compare and contrast information.

Then too, my observation of the students and students' discussions and remarks were revealing. Their curiosity and enthusiasm were limitless. Periodically, the students were asked to do self evaluations, as well as evaluations of what we were studying. Some of their answers to the question of whether they thought our study was worthwhile are following the next page. Even our guest speakers were surprised how informed , interested, and enthusiastic the students were. One man remarked that he never knew elementary kids knew so much and could ask so many questions.

The students' interest carried beyond the classroom, too. The class developed a new interest in current events. All year long students would volutarily bring in articles from magazines and the newspaper about ships and ports and later on trade. When we went to the Smithsonian Institution on our annual science and social studies field trip, for the first time the students were interested in seeing the ships and the maritime exhibits.

In addition, parents' comments helped me to evalute the study we were doing. Throughout the year, when I would meet parents, they would make positive comments about our study. At the conclusion of this year's annual night Tiny Town session, where parents visit and spend money they've earned, I showed the slide presentation about the Port of Wilmington to the parents. They were impressed with the knowledge their children had gained. Many made comments like: "My son has really taught me a lot this year." "Our whole family has learned so much about the Port of Wilmington we never knew."

At the end of the year I received some notes commenting on the year's study. Copies of a few of them are in the appendix. They definitely indicate the parents thought the students profited from this study. As one parent said, "...this experience will be remembered long after other, more conventional lessons have receded into consciousness."

In conclusion, I believe the fifth graders who participated in this study, who are the potential decision makers of our country, now have a basic foundation of economic concepts and reasoning on which to build and to use to help them meet their responsibilities as intelligent, informed citizens. I know that, as we travel back and forth to school and visit around the city, both the students and I will look at the ships on the Delaware River and the port in a new way with new insights.

Was the study of ships, the port, and trade worthwhile?

2) Yes, I thought it was worthwhile because we not only learned & saw alot, but it was fun.

② Yes, I think it was worthwhile because we need to know what's going on in the world.

(2) 5, Yes it was worth while because we learned alot about trading and why we trade.

2. Yes, it was worth while to study about the port because it taught you [illegible] grow up you need to know [illegible]

2.) Yes I think it was worthwhile because we toured the ship and we learned alot. Also it was a way to learn something when you're having fun.

2. I think it was worthwhile because it taught us about trade and vocabulary words that we will hear in the future and we will understand them.

2. Yes, because you learned and had fun

RESOURCES

Films

"Autoliners" - Hoegh-Ugland Autoliners, Port of Wilmington. Tells how cars are loaded, shipped, and unloaded from autoliners. Complete description of the process.

"Shipping Lumber" - Seaboard Shipping Co., Port of Wilmington. Tells how lumber is shipped all over the world. Gives a good description of different ports around the world.

"Canton Lantern" - Philadelphia Maritime Museum
Tells about all the different kinds of ships that use the Port of Philadelphia.

"Protecting Our Waterways" - Delaware Bay and River Cooperative
Decribes the precautions taken by ships, especially oil tankers, that use the Delaware River to keep it clean.

Speakers

Mr. Govertsen - works for Hoegh-Ugland Auto Liners at the Port of Wilmington; will talk about shipping cars and the company

Mr. Holmes Dogherty - Assistant port Director at the Port of Wilmington; will show a slide presentation about the port and describe the port's operations

Mr. Vitele - works for Christiana Stevedoring Co.; will talk about longshoremen and show pictures of how different goods are handled

Trips

Port of Wilmington - call the port for an appointment for a tour

Philadelphia Maritime Museum - call the museum for an appointment

Smithsonian Institution - no appointment necessary

Kits

"International Economics" - a multi-media program
Federal Reserve Bank of N.Y.
33 Liberty St.
N.Y., N.Y.

Booklets

American Enterprise Teaching Notes, Issue 12
Playback Associates
708 3rd Ave.
New York, New York 0017

Trees and TV in the International Marketplace - Washington State Council on Economic Education

(over)

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Booklet

"Port of Wilmington, Delaware" - published by
Port of Wilmington
P.O. Box 1191
Wilmington, DE 19899

Name ____________________

PRE-TEST

POST-TEST

PORT TEST

Directions: Circle the correct answer.

1. A lift truck is an example of a land resource.

True False

2. The factors of production are Land, labor, and capital.

True False

3. Circle all the items below which are resources used in running a port.

lift truck
fish
longshoremen
warehouses
crane
seagulls
swimming pool
tugboat
storage lot

4. Port workers specialize and are not dependent on each other.

True False

5. If a port has 6 berths and 10 ships want to dock, the price of berths will go up.

True False

6. A natural protected harbor is a land resource.

True False

7. Port A and Port B have equally good services. Port A charges $25 per hour for its services. Port B charges $30 per hour. Port A will have more business.

True False

8. People trade to obtain items they do not need or want.

True False

9. Name one advantage of specialization.

10. Name one disadvantage of specialization.

Name ______________________ 116

PRE-TEST

POST-TEST

INTERNATIONAL TRADE UNIT

Directions: Put the letter of the correct answer on the line beside the question.

_____ 1. The most basic problem faced by every economic society is:

A. Lack of technology
B. Cultural restraints
C. Lack of money
D. Scarcity

_____ 2. Why do nations trade?

A. Countries have to trade to provide jobs.
B. Countries cannot survive unless they trade.
C. They expect greater benefits than if they do not trade.
D. Some countries just make things better than other countries.

_____ 3. Because we must rely on one another for the things we want and need, we are:

A. Overly dependent
B. Independent
C. Dependent
D. Interdependent

_____ 4. The three basic functions of money are:

_____ 5.

_____ 6.

A. Measure of exchange
B. Check on value
C. Comparative advantage
D. Medium of exchange
E. Store of value
F. Measure of value

_____ 7. The value of a U.S. dollar in a foreign country is determined by:

A. Its store of value
B. The king of the country
C. Its supply and demand
D. The President of the U.S.

_____ 8. What is the most common reason why a country would place trade restrictions on imported goods?

A. To protect jobs and industries by reducing competition
B. To punish other countries
C. To raise money
D. To pay the expenses of our custom officers

_____ 9. What is free trade?

A. When countries give things away
B. The items have no value
C. One country will give something to another to help them
D. No barriers to trade exist

_____ 10. When countries agree to trade, generally it is because:

A. One country benefits
B. Both countries benefit
C. Neither country benefits
D. None of the above

TEST ON FOREIGN TRADE # 1

Put the letter of the correct answer on the line beside the question.

_____ 1. The value of a United States dollar in a foreign country is determined by:

A. Its store of value

B. The Money Market

C. Its supply and demand

D. The President of the United States

_____ 2. Where are money values set and money from foreign countries exchanged?

A. Currency markets

B. The United States Treasury

C. Foreign banks

_____ 3. A comparison of the monetary value of a country's imports with the monetary value of its exports is its:

A. Foreign exchange

B. Measure of value

C. Store of value

D. Balance of payment

_____ 4. To simplify the process of bookkeeping in the international trade, approximately what percentage of foreign trade is invoiced in United States dollars?

A. 50%   C. 85%

B. 70%   D. 100%

_____ 5. The three basic functions of money are:

_____ 6.

_____ 7.

A. Measure of exchange

B. Check on value

C. Comparative advantage

D. Medium of exchange

E. Store of value

F. Measure of value

_____ 8. When countries specialize in producing those things they can produce at the least cost and trade to get those which they produce at the highest cost, we say they are participating in:

A. Specialized trading

B. Comparative advantage

C. Balance of trade

A. The medium of exchange

TEST ON FOREIGN TRADE # 2

Put the letter of the correct answer on the line beside the question.

_____ 1. Government assistance to a company to help it compete with foreign companies is a/an:

A. Tariff
B. Quota
C. Subsidy
D. Embargo

_____ 2. A total decision not to trade with another country is a/an:

A. Embargo
B. Barrier
C. Cartel
D. Subsidy

_____ 3. A special fee on an imported good is a/an:

A. Embargo
B. Quota
C. Tariff
D. Subsidy

_____ 4. What is free trade?

A. There are no quotas imposed on goods.
B. The items have no value.
C. One country will give something to another to help them.
D. No barriers to trade exist.

_____ 5. A tariff will usually do what to the price of an imported good?

A. Raise the price
B. Lower the price
C. Have no effect on the price
D. Cause the price to fluctuate

_____ 6. What is the most common reason why a country would place trade restrictions on imported goods?

A. To protect jobs and industries by reducing competition
B. To punish other countries
C. To raise revenue
D. To pay the expenses of our customs officers

_____ 7. If you have only $200 and you buy a new camera but you can't buy the stereo you want, your opportunity cost is:

A. The camera
B. The stereo
C. The $200
D. You

_____ 8. When countries agree to trade, generally it is because:

A. One country benefits
B. Both countries benefit
C. Neither country benefits
D. None of the above

_____ 9. The trade will allow which of the following economic principles to function?

A. Specialization
B. Economies of scale
C. Comparative advantage
D. All of the above

_____10. The most desirable alternative(s) you must give up when you make a decision are your:

A. Benefits
B. Opportunity costs
C. Economic constraints
D. Political constraints

Name _______________________

TEST ON INTERNATIONAL TRADE # 3

COMPREHENSION TEST

Directions: Place the letter of the correct answer in the blank provided.

_____ 1. Which of the following descriptions best identifies the impact of foreign goods on the life style of the inhabitants of Delaware?

A. No impact.

B. It has improved the quality of life by providing jobs and greater variety of consumer goods for most people.

C. It has reduced the quality of life by eliminating jobs and wasting resources.

D. A few people have received great wealth at the expense of other individuals, both foreign and domestic.

_____ 2. One of the major reasons for an underdeveloped country is:

A. Unequal resource allocations

B. Stupidity

C. Trade barriers

D. Multinational corporations

_____ 3. The United States is economically best suited to produce jet airplanes because of:

A. Technology

B. Climate

C. Cheap labor

D. Air fields

_____ 4. Which of the following is true of international trade?

A. It uses scarce resources efficiently.

B. It provides products at lower costs.

C. It means more products are available for consumer markets.

D. All of the above.

_____ 5. Which of the statements below would be found in an argument in favor of trade barriers?

A. Cheap labor in foreign countries

B. Protect domestic industries

C. The product is essential to the military

D. All of the above

_____ 6. A tariff will do the following to the price of an imported good:

A. Raise the price

B. Lower the price

C. Have no effect on the price

D. Cause the price to fluctuate

_____ 7. Free trade will allow which of the following economic principles to function?

A. Specialization
B. Economies of scale
C. Comparative advantage
D. All of the above

_____ 8. A state of economic interdependence between countries results in which of the following conditions?

A. Costs for both countries
B. Benefits for both countries
C. Costs and benefits for both countries
D. None of the above

_____ 9. The reason Columbia produces coffee while the United States produces aircrafts is best explained by the principle of:

A. Comparative advantage
B. Opportunity costs
C. Tariffs
D. Embargoes

_____10. The value of one currency compared with another is decided primarily by:

A. Comparative advantage
B. Tariffs
C. Supply and Demand
D. Specialization

_____11. When countries agree to trade, generally it is because:

A. One country benefits
B. Both countries benefit
C. Neither of the countries benefits
D. None of the above

_____12. If you have $500 and you take a trip to Mexico but you can't buy the stereo system you want, your opportunity cost is:

A. The trip to Mexico
B. The stereo system
C. The trip to Mexico and the stereo system
D. The $500

_____13. Which of the following is a trade restraint?

A. Multinational corporation

B. Absolute advantage

C. Technology

D. Embargo

_____14. What is the most basic economic problem faced by all countries?

A. Unemployment C. Scarcity

B. Inflation D. Recession

_____15. Which of the following is a function of money?

A. Value of demand C. Mutual value

B. Opportunity cost D. Store of value

_____16. The concept which helps organize production so the total output of goods and services is increased is:

A. Absolute advantage

B. Technology

C. Political constraint

D. Balance of payments

_____17. The comparison of the monetary value of a country's imports with the monetary value of exports is:

A. Balance of payments C. Mediums of exchange

B. Tariffs D. Capital goods

_____18. An example of a capital resource would be:

A. A bank bond C. A bulldozer

B. A coal mine D. An airplane pilot

_____19. Which trade restraint affects not only purchases, but all citizens of a country?

A. Quota C. Embargo

B. Subsidy D. Tariff

_____20. In which product line does the United States have a comparative advantage over Japan?

A. Steel C. Televisions

B. Automobiles D. Aircraft

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Warner
Room 220

Joanna Orgirdy
April 20, 1982

My Trip to the Port
of Wilmington

On March 9, our reading class went to the Port of Wilmington. When we entered the port we saw the open storage area [illegible] a [illegible] dept. After we visited with the tour guide, Mr. Kelley, he took us on a little tour in the bus. He showed us the lumber and what the red ends meant. Then he took us onto a floating berth. We saw a tug pull out when we were on the berth. After that we got out of the bus and went on a walking tour. We went into at least 4 warehouses: a refrigerated warehouse, a freezer warehouse, a cocoa bean warehouse, and a jute warehouse. I enjoyed my trip. It was very

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Interesting. I hope I can go again

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Name [illegible]
Room # 204

J. Katz
April 26, 1983

105 words

Maritime Museum

I consider the Maritime Museum very interesting. It had model ships very much like big ships. Upstairs, they had ancient Chinese plates, slides, cups & paintings.

Downstairs, they had knives. They were long and curved at the ends. You could tell they were very sharp. Most of the museum were ships. They had small plastic ships, wooden ships, painted ships & metal ships.

I liked it very much as a museum for ships & underwater things. I liked it very much that I [illegible] visit it again. I want to thank [illegible] Myers for making it possible for us to go to Philadelphia.

"Delaware Economic Education Newsletter - Winter 1981

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ECONOMICS LESSON ABOARD NORWEGIAN AUTOLINER:--It's hard to tell who enjoyed the trip more, the 33 fifth graders from Doris Morris' class at Warner School or the crew on board the Karinta, a Norwegian Auto Carrier.

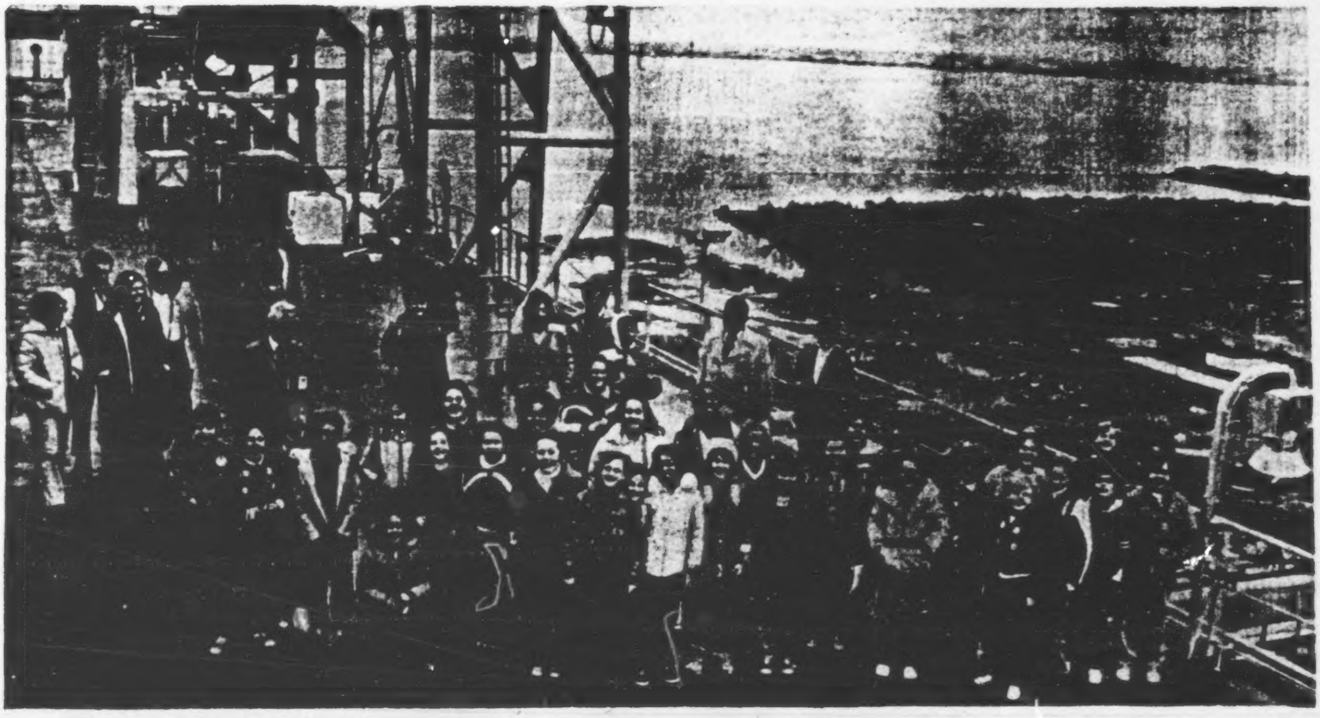
The students were guests of the Norwegian firm, Hoegh-Ugland Auto Liners. The tour of the Karinta was part of a year long economics project. The students are analyzing the economics impact of the Port of Wilmington on the City of Wilmington and the State of Delaware.

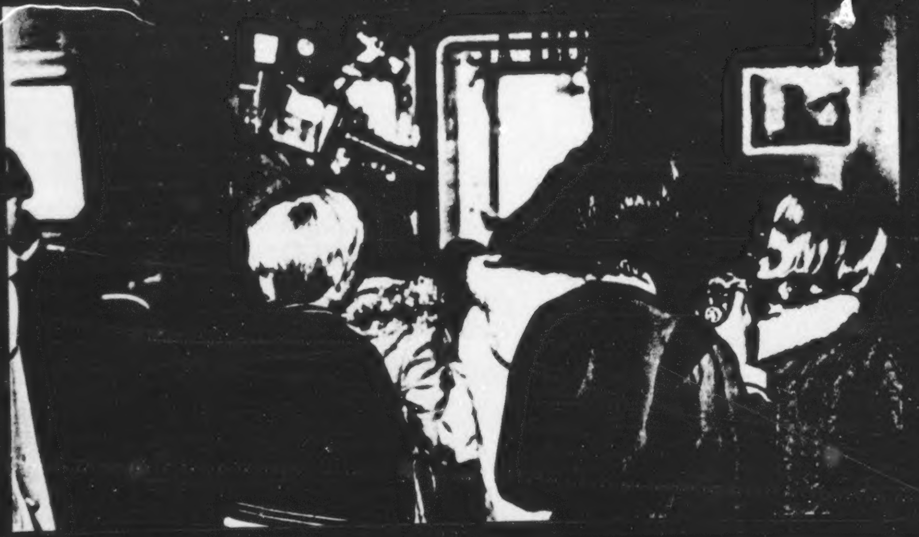
Prior to the trip students had corresponded with the shipping firm, researched the operation of the port and prepared specific questions for the captain and his crew. Some of the questions were: Why did Hoegh-Ugland pick Wilmington over other ports? How many employees are on board? What are their job responsibilities? How many longshoremen are needed to load and unload the ship?

The students received a first hand look at a labor dispute. When the class arrived at the port, they were expecting to see cars and trucks coming off the ship. Instead, longshoremen were not in sight. They had walked off the job earlier that morning because of a dispute over the amount of daily work each longshoreman would be guaranteed. A company official told the group that the dispute cost the company $25,000 per day. The students were duly impressed and agreed that labor problems definitely needed further study when they returned to the classroom.

As a result of the class' interest and enthusiasm over their study, the students have been invited to the Philadelphia port to visit a barge and have lunch with the crew. After exploring Philadelphia's port, the students can compare the two ports in terms of port traffic, size, labor supply, exports and imports.

Throughout the year, Doris Morris plans to cover numerous economic concepts including division of labor, comparative advantage, competition, supply and demand, productivity, interdependence and international trade. A return trip to the port is planned to examine the Wilmington Marine Terminal and its shipping activites. As a culminating activity, the class will produce its own slide presentation on the economic impact of a port. This will be used to explain to other students a port's economic impact on a community.





Students get their sea legs aboard a Norwegian vessel

By Nathan Gorenstein

Staff writer

Fifth grader Eileena Mathew had never been aboard a ship before. Neither had most of her Warner Elementary School classmates, who spent Monday afternoon combing the decks of a visiting Norwegian ship at the Port of Wilmington.

"I think it's fun," Jennifer Hays said.

So did the captain of the 12,552-ton Karanita, who snapped the kids' pictures with his pocket camera. The mate lifted them off their feet so they could peer into the ship's radar screen.

"Its the first time I've seen so many kids on board," Chief Officer Svein Dons said.

But there were still enough Norwegian treats for the 33 young visitors.

Made in Japan but registered in Norway and operated by a Norwegian firm, Hoegh-Ugland Auto Liners, the Karinita is docked at the Port of Wilmington until Thursday. It is unloading 1,937 German automobiles and 373 French-manufactured trucks. Afterwards, it will take on a load of American autos and trucks bound for the Middle East.

The students' visit clearly fell into the category of fun, but officially it served as a field trip in conjunction with a course in economics they are taking with teacher Doris R. Morris. The 10- and 11-year-olds did fulfill their academic duty, asking Captain Egil N. Tjostolvsen, Dons and the firm's local port captain, Paul R. Govertsen, about the ship's speed — it cruises at 18 knots; its cost — about $30 million; its crew — 26 or 27, and its itinerary — it will call at ports in Europe, America and the Middle East.

The children also got a firsthand glimpse of a labor dispute. When students arrived at the port at 11:40 a.m., they should have seen cars and trucks being driven off the ship. But instead, not a longshoreman was to be seen.

They walked off the job earlier that day because of an argument over how much work the men would be guaranteed each day, a company official said. Off-loading was expected to continue today, but the labor action Monday meant a $25,000 loss for the company, a shipping line official said.

> 'The captain overlooks everything, just like the principal at school.'

Pupils in Mrs. Morris' class from the Red Clay Consolidated School District's Warner school are analyzing the economic impact of the Port of Wilmington on the city of Wilmington. They are studying how the port operates, why shippers use that port rather than another and the economic factors used in making decisions that affect the port.

It is part of a year-long economics course during which the students will study such subjects as the division of labor, economic interdependence, productivity, resources and competition and international trade.

Before the visit to the ship, the children saw a film on the automobile unloading process. In class, they have been writing letters to the shipping firm and researching the operation of the port.

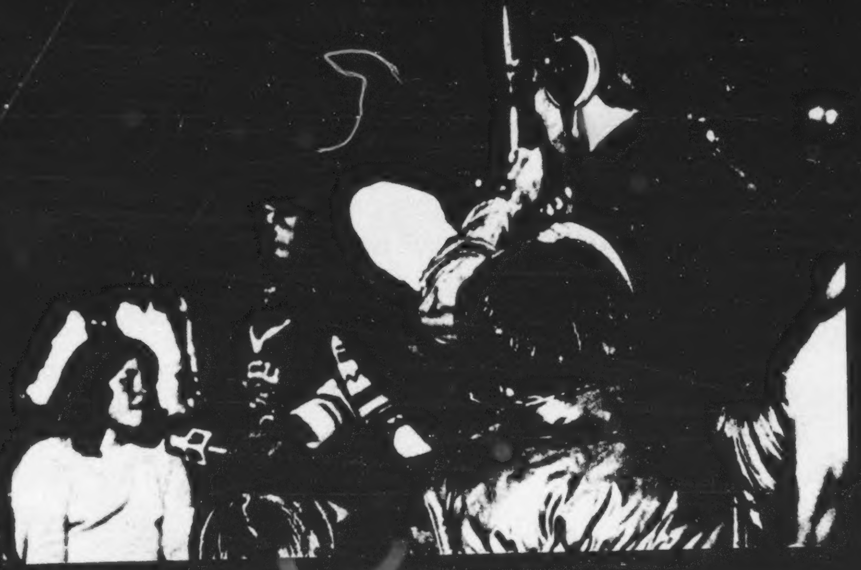
The owners of the Karinita chose Wilmington as the firm's American port because it has sufficient open space in which to store the vehicles unloaded from the ship, has easy access to highways and railroads and — usually — has little labor trouble, Mrs. Morris said.

The kids, however, were probably most impressed by the ship's size. It has 12 decks, can hold a maximum of 5,300 vehicles, is 636 feet long, 106 feet wide and 134 feet from the keel to the bridge.

At the dock, the students were met by Govertsen, a native of Norway who has lived in Wilmington for three years and whose job it is to see that the ship gets docking space, is unloaded, reloaded and sent back to sea on schedule.

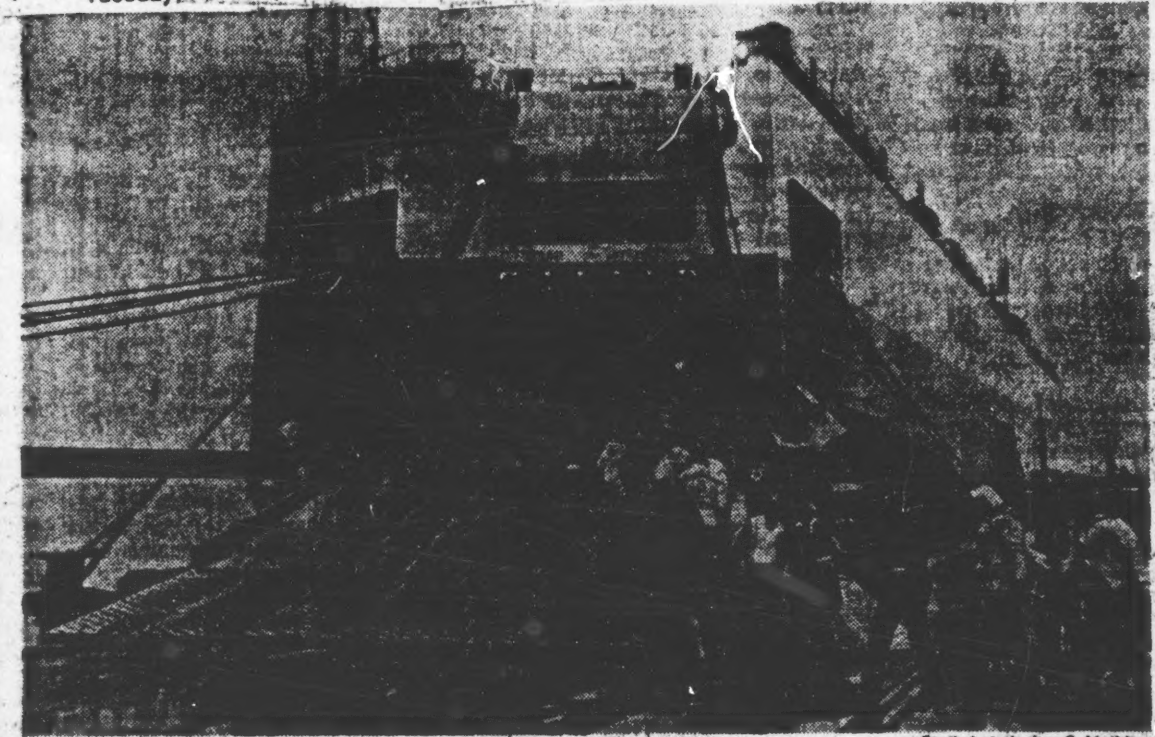
Dressed in an orange jump suit, Govertsen started the tour, giving the students a basic briefing on life aboard ship. "The crew has to do its own cooking, its own cleaning. The ship works as her own city," he said, and explained who runs the vessel. The captain, for example, "overlooks everything, just like the principal at school."

The principal of the Warner school, C. Charles Carmichael, laughed appreciatively. He had come along on the field trip, as curious about the port as his students



The local TV station and newspaper covered
our trip to the Karinita.

Tuesday, Nov. 17, 1981 **EVENING JOURNAL**



Staff photo by Leo S. Matkins

Doris R. Morris' fifth graders climb aboard a Norwegian ship for a first hand look at the operations of the ship and the Port of Wilmington.

Takk for alle tiders opphold

ombord på M/T JUANITA

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Jeg vil gjerne få takke kaptein Skorstad og hans besetning for en lærerik og interessant tid som jeg hadde som passasjer ombord på M/T JUANITA.

Turen startet for mitt vedkommende på Bahamas 2/11 1981, fortsatte til St. James ved Mississippi og derfra til Quinfuquena i Angola hvor vi lå i lastebøye i tre uker før vi satte baugen mot Europa og Rotterdam. Der var vi framme 10/1-82, og jeg gikk fra borde.

En slik tur bød ikke på det «landkrabbene» innbiller seg med «kvinner, vin og sang» i hver havn. I St. James var det riktignok noen få fra båten som kom på land, men det var kun fire-fem timer med hastig shopping.

Mens vi lå i Angola i tre uker hadde vi kun selskap fra fiskene som ble lurt på de mest underfundige måter. Den mest utspekulerte var forsøket med Stabburets Kjøttboller på kroken. Afrikansk fisk var kresen. Norske kjøttboller falt ikke i smak. «Fiskerne» ombord var tålmodige, så noe fisk fikk vi da se på lunchbordet.

I Angola gikk det ikke an å komme på land i følge den engelske losen som var ombord. Alt var så korrupt der inne. Dessuten hadde de ikke noe å by på av noe slag. Mat var det minimalt av. Det fikk vi se et godt eksempel på. En hollandsk surveyer vi fikk ombord hadde med seg en angolsk assistent som han skulle lære opp. Denne assistenten torde ikke spise seg mett ved måltidene. Han fortalte oss at han hadde apetitt, men han måtte ikke utvide magesekken for da ville han lide alle sultens kvaler når han skulle hjem igjen!

Det at mannskapet ikke kom på land var så sin sak. Det ble godtatt etterhvert. Mangelen på post fra familie og venner opptok alle mer og mer ettersom vi nærmet oss Rotterdam. Da hadde vi vært foruten skriftlig kommunikasjon i 2 1/2 mnd. Smilene var mange og store da posten endelig kom. De som hadde anledning stakk seg vekk på lugarene. Det var ikke mange fjes å se rundt omkring.

Jernkua var det ingenting å utsette på, men da den ekte kumelka kom på bordene var alt annet glemt. MELK! Bare ordet klang som musikk i ørene. Jeg må tilstå at jeg aldri har satt så meget pris på et glass kald melk som da. At melk kunne smake så godt!

Vi som er hjemme og har tilgang på f.eks. melk, post, miljøforandringer, venner og familie tenker ikke alltid på hva og hvor meget en sjømann egentlig går glipp av. Er det rart at de koser seg når de kommer hjem til en velfortjent ferie?

Jeg vil avslutte med å takke alle ombord for en koselig og opplevelsesrik tur. En tur jeg ikke ville vært foruten for alt i verden!

Hilsen
Eleanor Schw. Ellefsen

Visitors onboard M/V KARINITA

Desember 11, 1981

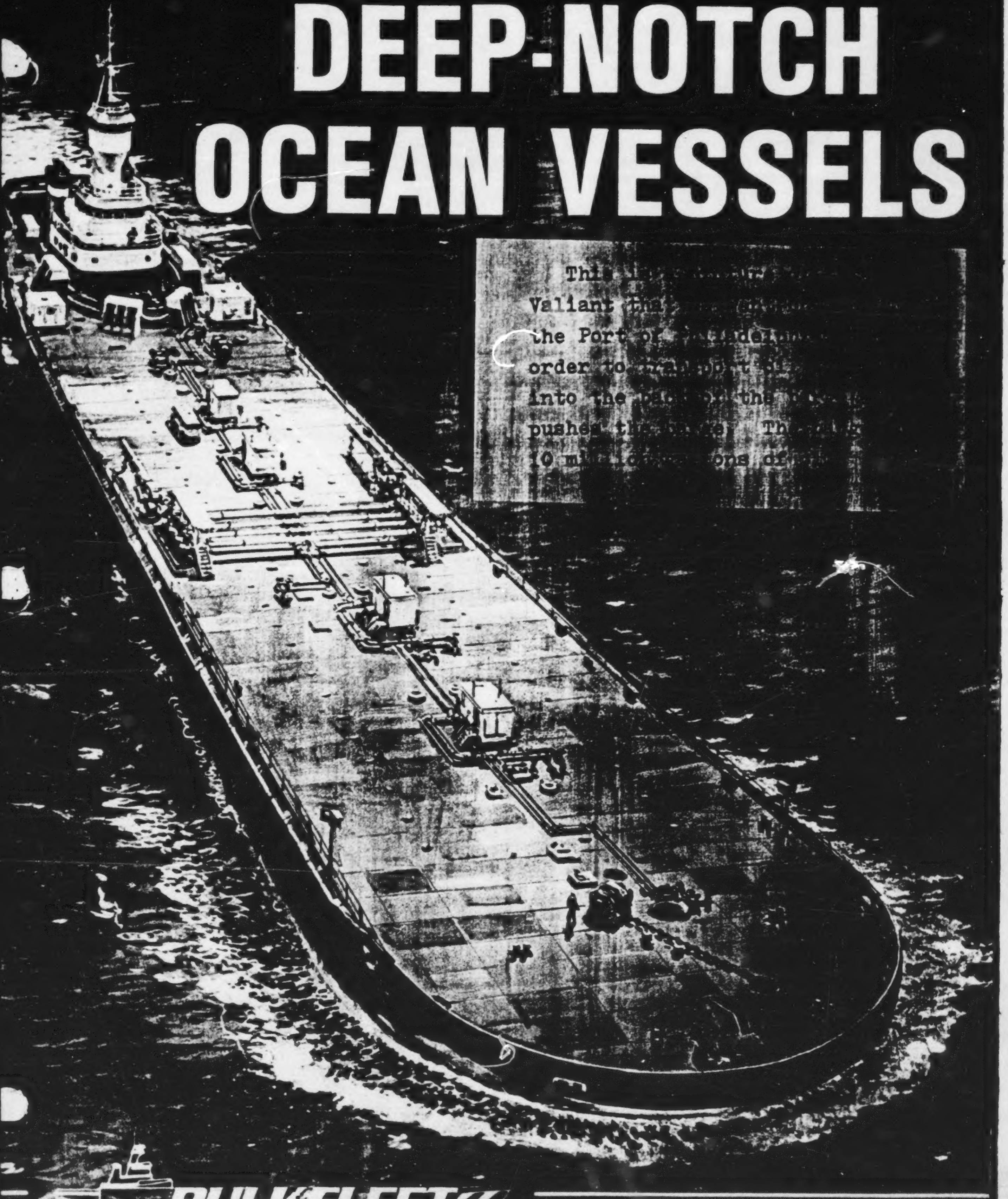
Dear Uglita,

In November my class of 36 fifth graders visited the KARINITA. We had been studying about auto liners that visit the port of Wilmington, and Paul Govertsen arranged for us to have a complete tour of the KARINITA. Captain Tjostolvsen, Chif Officer Dons, and the rest of the crew were very kind to us. Besides having our many questions answered and being able to see all the parts of the ship, we were treated to refreshments. It was the first time any of us had been on a ship, and it was truly an experience none of us will forget. We have a map in our room on which we now keep track of where the KARINITA is.

The captain and crew of the KARINITA and Mr. and Mrs Govertsen are outstanding ambassadors of good will, not only of HUAL, but of Norway. We thank them for their friendship, and we thought you ought to know of their kindness.

Sincerly,
Doris Morris

DEEP-NOTCH OCEAN VESSELS



This [illegible]
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BULKFLEET